RESULTS

OF

OBSERVATIONS OF THE FIXED STARS

MADE WITH THE

MERIDIAN CIRCLE

AT THE

GOVERNMENT OBSERVATORY MADRAS

IN THE YEARS 1877, 1878, AND 1879

UNDER THE DIRECTION OF THE LATE

NORMAN ROBERT POGSON, C.I.E., F.R.A.S.

BY

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OFFICIATING GOVERNMENT ASTRONOMER AT MADRAS

VOL VI.

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MADRAS

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1893

CONTENTS

INTRODUCTION.

The present volume contains the results of the observations made with the Madras Meridian Circle in the years 1877, 1878, and 1879. The number of observations dealt with is 9,637, of which 2,744 were made in 1877, 3,416 in 1878, and 3,477 in 1879. The observers were P. Ragoonathachari (P. R), who ceased to observe in 1878 and died in 1880, Mootoosawmy Pillai (M), and P. Ragavachari (P).

The great increase in the number of observations over previous years was, unfortunately, accompanied by a decrease in the accuracy of the reductions, which has caused a large amount of extra labour in preparing the present volume for publication, and an unduly large list of errata for the years 1877 and 1878. The work was also greatly increased by the circumstance that a large proportion of the stars were observed in these years for the first time and consequently the constants, which had previously been calculated only for approximate places, had to be completely revised, the precessions being recalculated with 5-figure instead of 4-figure logarithms. As an additional check the constants were compared, when possible, with those given in other catalogues. As a consequence of this extra work the publication of the volume has been somewhat delayed.

In the first volume of the present series it is mentioned that the latitude of the Observatory is uncertain to the extent of nearly 1″ and that it was proposed to make a fresh determination of the latitude from a discussion of all the observations of circumpolar stars. This cannot be done yet, but pending the final result of such a discussion it may be well to give the following results which indicate the probable amount of the correction that will have to be applied to the N. P. Ds. given in these volumes.

1. Determination made by Mr. G. P. Lennox Conyngham R.E. of the G. T. Survey of India, by Zenith Sector observations in January 1891

$$13^\circ\ 4'\ 8''\cdot77 \pm 0''\cdot067$$

2. From approximate reduction of observation of three circumpolar stars between 1862 and 1877.

(*a*)	From 110 observations of Polaris	$13^\circ\ 4'\ 8''\cdot64$
(*b*)	... 116 ... ... 51 Cephei	$8''\cdot68$
(*c*)	... 79 ... ... R. P. L. 150	$8''\cdot68$

The assumed latitude is

$$13^\circ\ 4'\ 8''\cdot1$$

and hence it is probable that the correction to be applied to the printed observations of N. P. D. is approximately

$$-0''\cdot6$$

This determination has, of course, no claim to be considered a final one, and was, in fact, made simply for the purpose of comparing the result deducible from the circumpolar observations with the result obtained with the Zenith Sector. The large deviations of individual observations from the mean indicate, as might have been expected, that the correction for refraction is often very uncertain, especially in the observations made *sub polo*, and it seems doubtful whether a thoroughly satisfactory determination of latitude can be made by means of circumpolar stars at a place situated so near the equator as Madras is. The close agreement between the four determinations given is probably accidental and cannot be considered as a test of their accuracy.

Instrumental Corrections adopted in 1877.

Date.	Observer.	Index.	Run in 5′.	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining Stars.
		″	″	*s*	*s*	*s*	*s*	
Jan. 1	R	− 11·4	0·0	− 0·19	+ 0·09	+ 0·04	+ 0·43	
4	,,	− 10·3	0·0	− 0·18	0·00	+ 0·03	+ 0·40	
5	,,	− 12·3	0·0	− 0·10	+ 0·03	+ 0·03	+ 0·39	35 and 115 R. P. L.
6	,,	− 12·3	0·0	− 0·03	+ 0·04	+ 0·04	+ 0·45	
8	,,	− 10·0	0·0	− 0·10	+ 0·07	+ 0·06	+ 0·56	43 and 116 R. P. L.
10	,,	− 10·4	0·0	− 0·09	+ 0·07	+ 0·05	+ 0·54	
12	,,	− 10·5	0·0	0·00	+ 0·05	+ 0·03	+ 0·53	
13	,,	− 10·6	0·0	+ 0·04	+ 0·03	+ 0·02	+ 0·52	33 and 115 R. P. L.
15	,,	− 10·4	0·0	+ 0·06	+ 0·04	+ 0·03	+ 0·40	
16	,,	− 10·7	0·0	+ 0·03	+ 0·08	+ 0·01	+ 0·35	35 and 111 R. P. L.
17	,,	− 10·0	0·0	+ 0·04	+ 0·13	+ 0·03	+ 0·41	
18	,,	− 10·1	0·0	+ 0·05	+ 0·13	+ 0·03	+ 0·47	40 and 115 R. P. L.
19	,,	− 11·6	0·0	0·00	+ 0·11	+ 0·04	+ 0·47	
22	,,	− 10·2	0·0	+ 0·01	+ 0·13	+ 0·05	+ 0·48	
23	,,	− 10·8	0·0	+ 0·06	+ 0·13	+ 0·03	+ 0·48	
24	,,	− 11·3	0·0	+ 0·04	+ 0·11	+ 0·02	+ 0·48	
25	,,	− 11·5	0·0	− 0·06	+ 0·13	+ 0·04	+ 0·48	40 R. P. L. & δ Urs. Min.
26	,,	− 10·8	0·0	− 0·08	+ 0·12	+ 0·04	+ 0·46	
27	,,	− 11·0	0·0	− 0·03	+ 0·10	+ 0·01	+ 0·45	43 R. P. L. & δ Urs. Min.
29	,,	− 11·5	0·0	− 0·06	+ 0·10	+ 0·02	+ 0·48	
30	,,	− 10·4	0·0	− 0·03	+ 0·13	+ 0·04	+ 0·50	
31	,,	− 10·9	0·0	+ 0·06	+ 0·11	+ 0·04	+ 0·51	49 and 143 R. P. L.
Feb. 2	M	− 11·7	+ 0·4	+ 0·07	+ 0·20	+ 0·08	+ 0·51	40 R. P. L. & ϵ Urs. Min.
3	,,	− 11·4	+ 0·4	0·00	+ 0·15	+ 0·05	+ 0·49	
5	,,	− 10·5	+ 0·4	+ 0·06	+ 0·25	+ 0·04	+ 0·46	40 R. P. L. & ϵ Urs. Min.
6	,,	− 11·1	+ 0·4	+ 0·13	+ 0·23	+ 0·03	+ 0·45	
7	,,	− 10·2	+ 0·4	+ 0·06	+ 0·24	0·00	+ 0·45	40 R. P. L. & ϵ Urs. Min.
8	,,	− 11·1	+ 0·4	+ 0·02	+ 0·21	0·00	+ 0·45	
9	,,	− 10·4	+ 0·4	+ 0·05	+ 0·19	0·00	+ 0·46	
10	,,	− 10·9	+ 0·4	0·00	+ 0·23	0·00	+ 0·46	40 and 131 R. P. L.
12	,,	− 10·6	+ 0·4	+ 0·14	+ 0·22	+ 0·02	+ 0·46	
13	,,	− 10·7	+ 0·4	+ 0·03	+ 0·20	+ 0·02	+ 0·46	
14	,,	− 11·0	+ 0·4	− 0·09	+ 0·21	+ 0·01	+ 0·46	43 R. P. L. & ϵ Urs. Min.
15	,,	− 10·9	+ 0·4	0·00	+ 0·19	+ 0·02	+ 0·47	
16	,,	− 11·2	+ 0·4	+ 0·03	+ 0·21	+ 0·02	+ 0·47	40 R. P. L. & δ Urs. Min.
17	,,	− 10·9	+ 0·4	+ 0·02	+ 0·24	+ 0·03	+ 0·49	
19	,,	− 11·4	+ 0·4	+ 0·05	+ 0·24	+ 0·04	+ 0·52	
20	,,	− 10·3	+ 0·4	+ 0·06	+ 0·22	+ 0·02	+ 0·54	49 and 143 R. P. L.
22	,,	− 10·5	+ 0·4	+ 0·06	+ 0·21	+ 0·04	+ 0·52	49 and 143 R. P. L.
23	,,	− 11·4	+ 0·4	− 0·08	+ 0·22	+ 0·05	+ 0·50	
24	,,	− 10·8	+ 0·4	− 0·17	+ 0·24	+ 0·05	+ 0·49	51 Cephei and δ Urs. Min.
26	,,	− 10·8	+ 0·4	− 0·10	+ 0·20	+ 0·02	+ 0·50	
27	,,	− 11·0	+ 0·4	+ 0·01	+ 0·20	+ 0·03	+ 0·50	51 Cephei and δ Urs. Min.
28	,,	− 10·8	+ 0·4	+ 0·13	+ 0·21	+ 0·03	+ 0·50	
Mar. 15	R	− 9·1	+ 0·1	+ 0·05	+ 0·27	+ 0·04	+ 0·50	49 R. P. L. and 83 Cancri.
16	,,	− 9·7	+ 0·1	− 0·06	+ 0·26	+ 0·02	+ 0·52	
17	,,	− 9·9	+ 0·1	− 0·06	+ 0·28	+ 0·04	+ 0·54	
19	,,	− 9·8	+ 0·1	− 0·03	+ 0·26	+ 0·03	+ 0·59	49 and 143 R. P. L.
20	,,	− 9·5	+ 0·1	− 0·09	+ 0·28	+ 0·03	+ 0·57	
21	,,	− 9·9	+ 0·1	− 0·04	+ 0·27	+ 0·03	+ 0·54	
22	,,	− 10·2	+ 0·1	− 0·03	+ 0·26	+ 0·02	+ 0·52	60 and 150 R. P. L.
23	,,	− 10·0	+ 0·1	− 0·07	+ 0·28	+ 0·04	+ 0·49	
24	,,	− 10·1	+ 0·1	− 0·32	+ 0·26	+ 0·03	+ 0·46	70 and 151 R. P. L.
26	,,	− 10·2	+ 0·1	− 0·60	+ 0·30	+ 0·04	+ 0·52	
27	,,	− 9·4	+ 0·1	− 0·40	+ 0·28	+ 0·04	+ 0·55	
28	,,	− 9·7	+ 0·1	− 0·29	+ 0·29	+ 0·02	+ 0·58	60 and 143 R. P. L.

Instrumental Corrections adopted in 1877.

Date.	Observer.	Index.	Run in 5′.	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining Stars.
		″	″	*s*	*s*	*s*	*s*	
Apl. 2	R	− 10·4	0·0	− 0·24	+ 0·30	+ 0·02	+ 0·50	
4	,,	− 9·7	0·0	− 0·20	+ 0·31	+ 0·03	+ 0·47	72 and 150 R. P. L.
5	,,	− 10·1	0·0	− 0·16	+ 0·34	+ 0·02	+ 0·47	
7	,,	− 9·3	0·0	− 0·12	+ 0·35	+ 0·03	+ 0·46	
10	,,	− 8·4	0·0	− 0·15	+ 0·37	+ 0·01	+ 0·45	72 and 151 R. P. L.
11	,,	− 8·6	0·0	− 0·10	+ 0·36	+ 0·03	+ 0·44	
12	,,	− 9·7	0·0	− 0·06	+ 0·35	+ 0·01	+ 0·43	
13	,,	− 8·8	0·0	− 0·12	+ 0·38	+ 0·02	+ 0·41	
14	,,	− 8·8	0·0	− 0·41	+ 0·37	+ 0·02	+ 0·40	70 and 150 R. P. L.
16	,,	− 7·9	0·0	− 0·53	+ 0·37	+ 0·02	+ 0·43	
17	,,	− 8·1	0·0	− 0·32	+ 0·34	+ 0·01	+ 0·44	72 and 151 R. P. L.
18	,,	− 8·0	0·0	− 0·32	+ 0·35	+ 0·01	+ 0·45	
19	,,	− 8·2	0·0	− 0·37	+ 0·35	+ 0·01	+ 0·47	
20	,,	− 8·7	0·0	− 0·31	+ 0·36	+ 0·03	+ 0·48	89 and 158 R. P. L.
21	,,	− 8·4	0·0	− 0·29	+ 0·36	+ 0·03	+ 0·48	
23	,,	− 7·9	0·0	− 0·30	+ 0·38	+ 0·03	+ 0·47	
26	,,	− 8·2	0·0	− 0·07	+ 0·40	+ 0·03	+ 0·46	
27	,,	− 8·0	0·0	− 0·12	+ 0·39	+ 0·04	+ 0·45	89 and 150 R. P. L.
28	,,	− 7·3	0·0	− 0·20	+ 0·37	+ 0·02	+ 0·38	
30	,,	− 8·0	0·0	− 0·04	+ 0·38	+ 0·05	+ 0·23	103 and 14 R. P. L.
May 2	M	− 7·8	− 0·2	− 0·19	+ 0·36	+ 0·01	+ 0·44	
3	,,	− 6·7	− 0·2	− 0·13	+ 0·48	+ 0·05	+ 0·54	9 R. P. L. and Polaris.
4	,,	− 7·1	− 0·2	− 0·01	+ 0·41	+ 0·01	+ 0·52	
5	,,	− 7·0	− 0·2	− 0·11	+ 0·41	+ 0·01	+ 0·51	99 R. P. L. and Polaris.
8	,,	− 6·4	− 0·2	− 0·15	+ 0·47	+ 0·05	+ 0·52	
9	,,	− 6·6	− 0·2	− 0·16	+ 0·44	+ 0·01	+ 0·52	99 R. P. L. and Polaris.
10	,,	− 6·1	− 0·2	− 0·17	+ 0·41	+ 0·01	+ 0·51	
12	,,	− 5·8	− 0·2	− 0·14	+ 0·46	+ 0·03	+ 0·48	
14	,,	− 7·0	− 0·2	− 0·10	+ 0·43	0·00	+ 0·45	
21	,,	...		+ 1·04	+ 0·25	+ 0·01	+ 0·31	89 R. P. L. and Polaris.
23	,,	+ 1·1	− 0·2	+ 0·95	+ 0·25	+ 0·04	+ 0·32	99 R. P. L. and Polaris.
24	,,	+ 1·2	− 0·2	− 0·15	+ 0·27	+ 0·02	+ 0·34	
25	,,	+ 1·2	− 0·2	− 0·30	+ 0·30	+ 0·02	+ 0·35	99 R. P. L. and Polaris.
26	,,	+ 0·3	− 0·2	− 0·34	+ 0·29	0·00	+ 0·37	
28	,,	+ 0·5	− 0·2	− 0·38	+ 0·34	0·00	+ 0·42	
29	,,	+ 0·8	− 0·2	− 0·38	+ 0·44	+ 0·05	+ 0·44	99 R. P. L. and Polaris.
30	,,	− 0·8	− 0·2	− 0·28	+ 0·32	0·00	+ 0·39	
31	,,	− 0·3	− 0·2	− 0·49	+ 0·34	+ 0·01	+ 0·34	99 R. P. L. and Polaris.
June 1	R	+ 0·7	− 0·1	− 0·55	+ 0·40	+ 0·03	+ 0·31	116 and 33 R. P. L.
2	,,	+ 0·3	− 0·1	− 0·47	+ 0·37	+ 0·03	+ 0·32	
4	,,	+ 0·1	− 0·1	− 0·66	+ 0·39	+ 0·04	+ 0·34	108 and 12 R. P. L.
5	,,	+ 0·7	− 0·1	− 0·61	+ 0·36	+ 0·02	+ 0·35	
6	,,	− 0·2	− 0·1	− 0·56	+ 0·37	+ 0·04	+ 0·36	
7	,,	− 0·3	− 0·1	− 0·57	+ 0·37	+ 0·02	+ 0·36	
9	,,	− 0·2	− 0·1	− 0·60	+ 0·35	+ 0·03	+ 0·38	
14	,,	+ 1·0	− 0·1	− 0·55	+ 0·34	+ 0·02	+ 0·42	
15	,,	+ 0·5	− 0·1	− 0·59	+ 0·35	+ 0·03	+ 0·43	ζ Draconis and 40 R. P. L.
16	,,	+ 0·4	− 0·1	− 0·64	+ 0·38	+ 0·02	+ 0·43	
18	,,	− 0·4	− 0·1	− 0·67	+ 0·36	+ 0·03	+ 0·43	
20	,,	− 0·8	− 0·1	− 0·67	+ 0·39	+ 0·03	+ 0·44	
21	,,	− 1·2	− 0·1	− 0·04	+ 0·37	+ 0·02	+ 0·44	
22	,,	− 1·4	− 0·1	− 0·04	+ 0·39	+ 0·04	+ 0·44	
23	M	− 2·0	− 0·2	− 0·12	+ 0·50	+ 0·02	+ 0·44	
25	,,	− 2·9	− 0·2	− 0·15	+ 0·50	− 0·01	+ 0·45	
27	,,	− 3·7	− 0·2	− 0·15	+ 0·49	+ 0·01	+ 0·45	
28	,,	− 2·9	− 0·2	− 0·11	+ 0·51	+ 0·01	+ 0·45	δ Urs. Min. and 51 Cephei.

May 21 Transit Clock cleaned
23 1lb weight put on clock shelf

May 15–18 Cyclone with 21·19 inches of rain

Instrumental Corrections adopted in 1877.

Date.	Observer.	Index.	Run in 5′.	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining stars.
		″	″	*s*	*s*	*s*	*s*	
June 29	M	− 3·3	− 0·2	− 0·10	+ 0·48	0·00	+ 0·45	
30	,,	− 3·5	− 0·2	− 0·10	+ 0·49	0·00	+ 0·45	
July 2	,,	− 4·3	− 0·1	− 0·07	+ 0·50	+ 0·03	+ 0·44	
3	,,	− 4·5	− 0·1	− 0·13	+ 0·49	0·00	+ 0·44	
4	,,	− 4·2	− 0·1	− 0·08	+ 0·48	− 0·01	+ 0·44	δ Urs. Min. and 51 Cephei.
5	,,	− 4·1	− 0·1	− 0·09	+ 0·47	− 0·03	+ 0·47	
6	,,	− 4·7	− 0·1	− 0·03	+ 0·52	+ 0·04	+ 0·50	
7	,,	− 4·9	− 0·1	+ 0·02	+ 0·48	+ 0·02	+ 0·53	
9	,,	− 5·4	− 0·1	+ 0·02	+ 0·52	+ 0·04	+ 0·60	δ Urs. Min. & δ Ophiuchi.
10	,,	− 4·5	− 0·1	0·00	+ 0·48	+ 0·01	+ 0·59	
11	,,	− 4·8	− 0·1	− 0·10	+ 0·51	+ 0·02	+ 0·58	
13	,,	− 5·4	− 0·1	+ 0·01	+ 0·45	0·00	+ 0·56	
14	,,	− 5·6	− 0·1	+ 0·07	+ 0·42	+ 0·01	+ 0·55	
16	,,	− 5·3	− 0·1	− 0·06	+ 0·47	+ 0·03	+ 0·53	
17	,,	− 5·4	− 0·1	− 0·10	+ 0·43	0·00	+ 0·52	
18	,,	− 6·2	− 0·1	+ 0·03	+ 0·40	− 0·01	+ 0·51	δ Urs. Min. and Antares.
19	,,	− 5·5	− 0·1	+ 0·04	+ 0·37	− 0·03	+ 0·50	
20	,,	− 4·9	− 0·1	− 0·01	+ 0·41	0·00	+ 0·50	
21	,,	− 5·3	− 0·1	+ 0·01	+ 0·42	+ 0·01	+ 0·49	
23	,,	− 4·9	− 0·1	+ 0·08	+ 0·45	− 0·01	+ 0·48	
30	,,	− 5·2	− 0·1	+ 0·20	+ 0·40	+ 0·01	+ 0·44	
31	,,	− 5·6	− 0·1	+ 0·20	+ 0·39	0·00	+ 0·44	
Aug. 3	R	− 4·8	0·0	+ 0·22	+ 0·37	+ 0·02	+ 0·48	
4	,,	− 4·9	0·0	+ 0·23	+ 0·34	+ 0·02	+ 0·43	
7	,,	− 4·5	0·0	+ 0·28	+ 0·40	+ 0·02	+ 0·40	143 R. P. L. and ε Scorpii.
8	,,	− 5·2	0·0	+ 0·19	+ 0·35	+ 0·01	+ 0·42	
9	,,	− 4·9	0·0	+ 0·25	+ 0·36	+ 0·02	+ 0·44	
10	M	− 5·7	0·0	+ 0·39	+ 0·42	+ 0·05	+ 0·45	
14	R	− 5·0	0·0	+ 0·13	+ 0·37	+ 0·02	+ 0·53	
15	,,	− 5·4	0·0	+ 0·07	+ 0·36	+ 0·03	+ 0·55	
16	,,	− 4·4	0·0	+ 0·12	+ 0·37	+ 0·03	+ 0·57	η Cygni and 40 R. P. L.
17	,,	− 5·7	0·0	+ 0·19	+ 0·38	+ 0·03	+ 0·57	
20	,,	− 5·5	0·0	+ 0·20	+ 0·37	+ 0·01	+ 0·57	
21	,,	− 5·5	0·0	+ 0·17	+ 0·38	+ 0·02	+ 0·57	
22	,,	− 6·1	0·0	+ 0·11	+ 0·39	+ 0·03	+ 0·57	
23	,,	− 5·5	0·0	+ 0·20	+ 0·36	+ 0·03	+ 0·57	
24	,,	− 4·9	0·0	+ 0·26	+ 0·35	+ 0·01	+ 0·57	
25	,,	− 5·0	0·0	+ 0·22	+ 0·38	+ 0·02	+ 0·57	
27	,,	− 5·7	0·0	+ 0·22	+ 0·40	+ 0·02	+ 0·57	131 and 43 R. P. L.
Sep. 1	,,	− 6·0	0·0	+ 0·18	+ 0·38	+ 0·03	+ 0·66	
3	,,	− 5·1	0·0	+ 0·23	+ 0·38	+ 0·04	+ 0·69	
5	M	− 5·7	− 0·1	+ 0·03	+ 0·37	+ 0·01	+ 0·73	150 R. P. L. and ε Pegasi.
6	,,	− 4·8	− 0·1	+ 0·09	+ 0·38	+ 0·04	+ 0·69	
7	,,	− 5·0	− 0·1	+ 0·17	+ 0·36	+ 0·02	+ 0·65	
8	,,	− 3·9	− 0·1	+ 0·13	+ 0·38	+ 0·02	+ 0·61	δ Urs. Min. and 51 Cephei.
10	,,	− 4·2	− 0·1	+ 0·29	+ 0·37	+ 0·04	+ 0·72	150 and 72 R. P. L.
11	,,	− 4·0	− 0·1	+ 0·30	+ 0·36	+ 0·02	+ 0·72	
12	,,	− 3·4	− 0·1	+ 0·34	+ 0·40	+ 0·05	+ 0·72	
13	,,	− 4·1	− 0·1	+ 0·22	+ 0·35	+ 0·02	+ 0·73	
14	,,	− 4·0	− 0·1	+ 0·14	+ 0·40	+ 0·06	+ 0·73	
15	,,	− 4·1	− 0·1	+ 0·24	+ 0·37	+ 0·03	+ 0·73	
17	,,	− 4·9	− 0·1	+ 0·27	+ 0·37	+ 0·03	+ 0·74	150 and 72 R. P. L.
18	,,	− 4·4	− 0·1	+ 0·26	+ 0·34	+ 0·01	+ 0·74	
19	,,	− 4·8	− 0·1	+ 0·14	+ 0·35	+ 0·02	+ 0·73	
20	,,	− 4·9	− 0·1	+ 0·28	+ 0·35	0·00	+ 0·73	
21	,,	− 4·6	− 0·1	+ 0·33	+ 0·34	+ 0·01	+ 0·72	

Instrumental Corrections adopted in 1877.

Date.	Observer.	Index.	Run in 5′.	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining Stars.
		″	″	s	s	s	s	
Sep. 22	M	− 4·7	− 0·1	+ 0·16	+ 0·34	0·00	+ 0·72	
24	,,	− 4·8	− 0·1	+ 0·08	+ 0·36	+ 0·02	+ 0·71	
25	,,	− 3·7	− 0·1	+ 0·07	+ 0·35	+ 0·03	+ 0·71	
27	,,	− 4·8	− 0·1	+ 0·03	+ 0·32	− 0·01	+ 0·70	150 and 72 R. P. L.
28	,,	− 4·1	− 0·1	− 0·04	+ 0·36	+ 0·02	+ 0·71	
Oct. 1	R	− 4·5	0·0	− 0·05	+ 0·35	+ 0·04	+ 0·74	150 and 72 R. P. L.
2	,,	− 4·0	0·0	+ 0·02	+ 0·36	+ 0·03	+ 0·73	
3	,,	− 4·5	0·0	+ 0·03	+ 0·34	+ 0·02	+ 0·73	
4	,,	− 4·5	0·0	+ 0·06	+ 0·37	+ 0·04	+ 0·72	150 and 70 R. P. L.
5	,,	− 4·2	0·0	+ 0·11	+ 0·34	+ 0·02	+ 0·69	
6	,,	− 5·3	0·0	+ 0·08	+ 0·35	+ 0·02	+ 0·66	151 and 72 R. P. L.
8	,,	− 4·5	0·0	+ 0·09	+ 0·34	+ 0·02	+ 0·60	
9	,,	− 4·4	0·0	+ 0·10	+ 0·37	+ 0·03	+ 0·58	
10	,,	− 5·0	0·0	+ 0·08	+ 0·35	+ 0·02	+ 0·55	143 and 60 R. P. L.
13	,,	− 3·9	0·0	− 0·11	+ 0·34	0·00	+ 0·75	151 and 70 R. P. L.
15	,,	− 4·2	0·0	− 0·20	+ 0·34	− 0·01	+ 0·64	
16	,,	− 4·7	0·0	− 0·21	+ 0·35	+ 0·01	+ 0·59	143 and 60 R. P. L.
17	,,	− 5·6	0·0	− 0·07	+ 0·38	0·00	+ 0·60	
18	,,	− 5·0	0·0	+ 0·10	+ 0·34	− 0·01	+ 0·60	
19	,,	− 4·2	0·0	+ 0·14	+ 0·37	− 0·01	+ 0·61	
20	,,	− 5·2	0·0	+ 0·05	+ 0·39	0·00	+ 0·62	143 and 60 R. P. L.
22	,,	− 4·3	0·0	− 0·11	+ 0·41	+ 0·03	+ 0·66	
24	,,	− 5·1	0·0	− 0·21	+ 0·39	0·00	+ 0·71	
25	,,	− 5·4	0·0	− 0·22	+ 0·39	0·00	+ 0·73	
27	,,	− 4·4	0·0	− 0·13	+ 0·38	0·00	+ 0·78	
31	,,	− 2·1	0·0	+ 0·08	+ 0·36	+ 0·01	+ 0·87	151 and 103 R. P. L.
Nov. 1	,,	− 0·1	0·0	+ 0·04	+ 0·34	+ 0·01	+ 0·87	
2	,,	+ 0·8	0·0	0·00	+ 0·32	+ 0·02	+ 0·87	
3	,,	+ 1·7	0·0	− 0·01	+ 0·30	+ 0·01	+ 0·87	14 and 99 R. P. L.
6	,,	+ 0·5	0·0	− 0·07	+ 0·32	0·00	+ 0·91	
7	,,	+ 1·1	0·0	− 0·19	+ 0·31	0·00	+ 0·93	
10	,,	+ 2·6	0·0	− 0·01	+ 0·31	0·00	+ 0·97	
12	,,	+ 3·2	0·0	+ 0·02	+ 0·33	0·00	+ 1·00	14 and 72 R. P. L.
16	M	+ 6·6	+ 0·3	+ 0·03	+ 0·22	− 0·02	+ 0·71	150 R. P. L. & γ Piscium.
17	,,	+ 6·1	+ 0·3	+ 0·02	+ 0·23	− 0·01	+ 0·69	
19	,,	+ 5·1	+ 0·3	− 0·10	+ 0·26	0·00	+ 0·64	35 R. P. L. and β Ceti.
20	,,	+ 4·5	+ 0·3	− 0·10	+ 0·26	− 0·02	+ 0·66	
21	,,	+ 4·6	+ 0·3	− 0·04	+ 0·28	− 0·03	+ 0·67	
22	,,	+ 2·9	+ 0·3	− 0·02	+ 0·22	− 0·05	+ 0·69	2 Urs. Min. & 116 R. P. L.
23	,,	+ 2·8	+ 0·3	− 0·05	+ 0·26	− 0·02	+ 0·68	
24	,,	+ 2·9	+ 0·3	− 0·05	+ 0·25	− 0·05	+ 0·67	2 Urs. Min. & θ^1 Ceti.
26	,,	+ 1·7	+ 0·3	− 0·10	+ 0·29	− 0·04	+ 0·69	
27	,,	+ 2·0	+ 0·3	− 0·15	+ 0·32	− 0·04	+ 0·70	33 and 114 R. P. L.
28	,,	+ 2·3	+ 0·3	− 0·05	+ 0·30	− 0·03	+ 0·72	
29	,,	+ 1·5	+ 0·3	− 0·21	+ 0·31	− 0·04	+ 0·73	2 Urs. Min. and 89 R. P. L.
30	R	+ 1·3	0·0	− 0·39	+ 0·33	+ 0·06	+ 0·74	
Dec. 3	,,	+ 1·9	0·0	− 0·19	+ 0·30	0·00	+ 0·77	26 and 89 R. P. L.
4	,,	+ 2·3	0·0	− 0·20	+ 0·29	0·00	+ 0·79	
6	,,	+ 2·7	0·0	− 0·16	+ 0·29	0·00	+ 0·83	
10	,,	+ 3·2	0·0	− 0·16	+ 0·29	0·00	+ 0·92	14 and 98 R. P. L.
11	,,	+ 1·9	0·0	− 0·10	+ 0·30	+ 0·01	+ 0·87	
12	,,	+ 2·9	0·0	0·00	+ 0·30	0·00	+ 0·82	
13	,,	+ 2·1	0·0	+ 0·01	+ 0·32	0·00	+ 0·78	
14	,,	+ 1·4	0·0	− 0·14	+ 0·32	0·00	+ 0·73	2 Urs. Min. and 89 R. P. L.
15	,,	+ 1·4	0·0	− 0·22	+ 0·32	+ 0·01	+ 0·77	
17	,,	+ 1·6	0·0	− 0·19	+ 0·31	0·00	+ 0·85	

Instrumental Corrections adopted in 1877.

Date.	Observer.	Index.	Run in 5′	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining Stars.
		″	″	*s*	*s*	*s*	*s*	
Dec. 18	R	+ 1·7	0·0	− 0·16	+ 0·31	0·00	+ 0·89	
19	„	+ 1·1	0·0	− 0·08	+ 0·34	0·00	+ 0·93	33 and 103 R. P. L.
21	M	+ 0·3	+ 0·2	+ 0·01	+ 0·34	− 0·04	+ 0·62	Polaris and 111 R. P. L.
27	„	− 0·8	+ 0·2	− 0·19	+ 0·34	− 0·01	+ 0·66	Polaris and 116 R. P. L.
29	„	− 1·0	+ 0·2	− 0·18	+ 0·31	− 0·05	+ 0·76	40 and 116 R. P. L.

Instrumental Corrections adopted in 1878.

Date.	Observer.	Index.	Run in 5′.	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining Stars.
		″	″	*s*	*s*	*s*	*s*	
Jan. 4	M	− 3·9	0·0	− 0·24	+ 0·32	− 0·06	+ 0·76	
5	,,	− 4·7	0·0	− 0·18	+ 0·39	0·00	+ 0·76	33 and 114 R. P. L.
7	,,	− 4·9	0·0	− 0·22	+ 0·35	− 0·02	+ 0·75	
8	,,	− 5·1	0·0	− 0·22	+ 0·37	− 0·02	+ 0·74	33 and 114 R. P. L.
9	,,	− 6·0	0·0	+ 0·04	+ 0·39	+ 0·03	+ 0·72	
10	,,	− 6·0	0·0	+ 0·06	+ 0·33	− 0·04	+ 0·70	33 and 114 R. P. L.
11	,,	− 5·6	0·0	− 0·08	+ 0·34	− 0·02	+ 0·71	
14	,,	− 6·5	0·0	− 0·17	+ 0·33	− 0·01	+ 0·73	33 and 114 R. P. L.
15	,,	− 6·4	0·0	− 0·25	+ 0·33	− 0·01	+ 0·72	
16	,,	− 6·1	0·0	− 0·15	+ 0·32	− 0·03	+ 0·72	
17	,,	− 6·6	0·0	− 0·09	+ 0·34	− 0·01	+ 0·71	
18	,,	− 7·2	0·0	− 0·12	+ 0·33	− 0·01	+ 0·71	34 and 116 R. P. L.
19	,,	− 6·7	0·0	− 0·12	+ 0·29	− 0·02	+ 0·71	
21	,,	− 7·2	0·0	− 0·14	+ 0·32	− 0·03	+ 0·72	
22	,,	− 7·0	0·0	− 0·08	+ 0·32	− 0·02	+ 0·72	34 and 116 R. P. L.
23	,,	− 6·5	0·0	− 0·06	+ 0·33	− 0·02	+ 0·73	
24	,,	− 7·1	0·0	− 0·11	+ 0·32	− 0·02	+ 0·73	
25	,,	− 7·5	0·0	− 0·14	+ 0·33	− 0·03	+ 0·74	
26	,,	− 6·6	0·0	− 0·12	+ 0·33	− 0·04	+ 0·74	34 and 116 R. P. L.
28	,,	− 7·4	0·0	− 0·11	+ 0·32	− 0·04	+ 0·69	
29	,,	− 7·6	0·0	− 0·13	+ 0·32	− 0·05	+ 0·67	40 and 116 R. P. L.
30	,,	− 8·0	0·0	− 0·11	+ 0·33	− 0·04	+ 0·70	
31	,,	− 7·8	0·0	− 0·02	+ 0·36	− 0·03	+ 0·74	40 and 116 R. P. L.
Feb. 1	R	− 7·5	0·0	− 0·10	+ 0·30	− 0·01	+ 0·72	
2	,,	− 8·7	0·0	− 0·15	+ 0·32	− 0·01	+ 0·70	
4	,,	− 8·0	0·0	− 0·07	+ 0·35	− 0·01	+ 0·66	43 R. P. L. and δ Urs. Min.
5	,,	− 8·5	0·0	− 0·12	+ 0·36	− 0·01	+ 0·65	
6	,,	− 8·7	0·0	− 0·10	+ 0·34	− 0·01	+ 0·64	43 R. P. L. and ϵ Urs. Min.
7	,,	− 8·3	0·0	− 0·05	+ 0·34	− 0·01	+ 0·64	
8	,,	− 8·1	0·0	− 0·06	+ 0·36	− 0·01	+ 0·63	
9	,,	− 8·7	0·0	− 0·07	+ 0·35	− 0·01	+ 0·62	40 R. P. L. and ϵ Urs. Min.
11	,,	− 8·4	0·0	− 0·09	+ 0·35	− 0·01	+ 0·64	
12	,,	− 8·3	0·0	− 0·07	+ 0·36	+ 0·01	+ 0·65	
13	,,	− 7·9	0·0	+ 0·02	+ 0·37	+ 0·01	+ 0·66	43 R. P. L. and ϵ Urs. Min.
14	,,	− 8·7	0·0	+ 0·01	+ 0·37	0·00	+ 0·68	
15	,,	− 8·7	0·0	− 0·06	+ 0·36	0·00	+ 0·69	
16	,,	− 8·5	0·0	− 0·02	+ 0·35	+ 0·01	+ 0·71	40 R. P. L. and δ Urs. Min.
18	,,	− 7·5	0·0	+ 0·11	+ 0·36	0·00	+ 0·68	
19	,,	− 8·4	0·0	+ 0·05	+ 0·35	0·00	+ 0·67	
20	,,	− 9·2	0·0	+ 0·01	+ 0·37	+ 0·01	+ 0·66	40 R. P. L. and δ Urs. Min.
21	,,	− 8·2	0·0	+ 0·10	+ 0·34	0·00	+ 0·68	
22	,,	− 7·8	0·0	+ 0·08	+ 0·35	+ 0·01	+ 0·69	
25	,,	− 7·6	0·0	− 0·12	+ 0·35	+ 0·01	+ 0·73	43 R. P. L. & 24 Urs. Min.
26	,,	− 8·4	0·0	− 0·08	+ 0·38	0·00	+ 0·72	
27	,,	− 8·3	0·0	0·00	+ 0·38	0·00	+ 0·70	
28	,,	− 8·4	0·0	+ 0·03	+ 0·37	0·00	+ 0·68	
Mar. 1	,,	− 8·4	0·0	− 0·03	+ 0·37	0·00	+ 0·66	
2	,,	− 8·6	0·0	− 0·01	+ 0·37	+ 0·01	+ 0·65	49 R. P. L. & δ Urs. Min.
4	M	− 7·9	0·0	− 0·01	+ 0·36	− 0·02	+ 0·70	
5	,,	− 8·0	0·0	+ 0·03	+ 0·39	− 0·01	+ 0·72	40 R. P. L. & α Columbæ.
6	,,	− 8·1	0·0	− 0·01	+ 0·36	− 0·04	+ 0·70	
7	,,	− 7·2	0·0	− 0·04	+ 0·41	− 0·01	+ 0·68	
8	,,	− 8·0	0·0	0·00	+ 0·40	− 0·01	+ 0·66	
9	,,	− 8·0	0·0	− 0·07	+ 0·38	− 0·01	+ 0·64	51 Cephei & δ Urs. Min.
11	,,	− 7·6	0·0	+ 0·07	+ 0·44	+ 0·03	+ 0·63	
12	,,	− 8·5	0·0	+ 0·04	+ 0·40	− 0·02	+ 0·63	51 Cephei & δ Urs. Min.
13	,,	− 8·2	0·0	− 0·02	+ 0·43	0·00	+ 0·64	

Instrumental Corrections adopted in 1878.

Date.	Observer.	Index.	Run in 5′.	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining Stars
		″	″	*s*	*s*	*s*	*s*	
Mar. 14	M	− 7·8	0·0	+ 0·09	+ 0·40	+ 0·01	+ 0·65	
15	,,	− 7·9	0·0	+ 0·06	+ 0·35	− 0·05	+ 0·66	
16	,,	− 7·7	0·0	− 0·06	+ 0·40	− 0·04	+ 0·66	60 and 143 R. P. L.
18	,,	− 8·5	0·0	0·00	+ 0·39	0·00	+ 0·64	
19	,,	− 8·0	0·0	− 0·09	+ 0·43	− 0·01	+ 0·63	
20	,,	− 7·9	0·0	− 0·03	+ 0·41	− 0·03	+ 0·63	
21	,,	− 7·9	0·0	− 0·01	+ 0·44	− 0·02	+ 0·62	
22	,,	− 7·9	0·0	− 0·07	+ 0·44	− 0·02	+ 0·61	
23	,,	− 8·3	0·0	+ 0·02	+ 0·45	− 0·01	+ 0·60	70 and 150 R. P. L.
25	,,	− 8·1	0·0	− 0·09	+ 0·41	− 0·05	+ 0·59	
26	,,	− 8·1	0·0	− 0·09	+ 0·47	+ 0·01	+ 0·58	
27	,,	− 7·8	0·0	− 0·04	+ 0·40	− 0·03	+ 0·58	
28	,,	− 7·6	0·0	− 0·12	+ 0·41	− 0·02	+ 0·57	70 and 150 R. P. L.
29	,,	− 7·5	0·0	− 0·10	+ 0·46	− 0·01	+ 0·58	
30	,,	− 7·4	0·0	− 0·07	+ 0·44	− 0·04	+ 0·60	
Apl. 1	,,	− 6·6	0·0	− 0·12	+ 0·49	− 0·01	+ 0·63	
2	,,	− 6·8	0·0	− 0·18	+ 0·47	− 0·02	+ 0·65	70 and 150 R. P. L.
3	R	− 8·0	0·0	− 0·19	+ 0·44	− 0·01	+ 0·64	
4	,,	− 7·3	0·0	− 0·18	+ 0·44	0·00	+ 0·64	
5	,,	− 7·7	0·0	− 0·24	+ 0·45	− 0·01	+ 0·63	
6	,,	− 7·7	0·0	− 0·23	+ 0·46	0·00	+ 0·63	70 and 150 R. P. L.
8	,,	− 7·2	0·0	− 0·07	+ 0·44	0·00	+ 0·64	
9	,,	− 8·0	0·0	− 0·13	+ 0·45	0·00	+ 0·65	
10	,,	− 7·0	0·0	− 0·18	+ 0·47	+ 0·01	+ 0·66	70 and 150 R. P. L.
11	,,	− 7·8	0·0	− 0·14	+ 0·47	− 0·01	+ 0·66	
12	,,	− 6·9	0·0	− 0·13	+ 0·48	− 0·01	+ 0·66	
15	,,	− 7·1	0·0	− 0·05	+ 0·47	− 0·01	+ 0·66	
17	,,	− 6·8	0·0	− 0·04	+ 0·46	− 0·01	+ 0·65	
22	,,	− 6·2	0·0	− 0·13	+ 0·47	0·00	+ 0·65	70 and 150 R. P. L.
24	,,	− 7·2	0·0	− 0·14	+ 0·46	0·00	+ 0·65	
25	,,	− 6·6	0·0	− 0·07	+ 0·47	0·00	+ 0·65	
26	,,	− 7·0	0·0	0·00	+ 0·47	0·00	+ 0·66	
27	,,	− 6·8	0·0	− 0·03	+ 0·47	0·00	+ 0·66	70 and 150 R. P. L.
29	,,	− 6·7	0·0	− 0·08	+ 0·48	0·00	+ 0·66	
30	,,	− 6·2	0·0	− 0·05	+ 0·49	0·00	+ 0·66	
May 1	,,	− 6·8	0·0	− 0·05	+ 0·48	− 0·01	+ 0·66	
4	,,	− 6·3	0·0	− 0·06	+ 0·50	+ 0·01	+ 0·66	
6	,,	− 6·7	0·0	− 0·06	+ 0·49	− 0·01	+ 0·66	
8	,,	− 6·1	0·0	− 0·09	+ 0·49	− 0·01	+ 0·66	98 and 150 R. P. L.
10	,,	− 6·1	0·0	− 0·12	+ 0·50	− 0·01	+ 0·66	
11	,,	− 6·3	0·0	− 0·15	+ 0·50	− 0·01	+ 0·66	
15	,,	− 6·1	0·0	+ 0·37	+ 0·52	− 0·01	+ 0·65	98 and 158 R. P. L.
16	M	− 5·9	− 0·1	+ 0·14	+ 0·50	− 0·03	+ 0·63	
17	,,	− 5·6	− 0·1	− 0·22	+ 0·53	− 0·01	+ 0·61	
20	,,	− 5·1	− 0·1	− 0·07	+ 0·56	− 0·01	+ 0·56	89 and 158 R. P. L.
21	,,	− 6·6	− 0·1	− 0·11	+ 0·54	− 0·03	+ 0·56	
22	,,	− 5·8	− 0·1	− 0·21	+ 0·56	− 0·02	+ 0·56	
23	,,	− 5·3	− 0·1	− 0·27	+ 0·56	− 0·01	+ 0·56	
24	,,	− 4·8	− 0·1	− 0·13	+ 0·57	+ 0·01	+ 0·57	
25	,,	− 4·7	− 0·1	− 0·03	+ 0·58	+ 0·02	+ 0·57	89 R. P. L. and Polaris.
27	,,	− 4·4	− 0·1	− 0·24	+ 0·54	− 0·02	+ 0·54	
28	,,	− 5·2	− 0·1	− 0·14	+ 0·54	− 0·02	+ 0·53	
29	,,	− 4·7	− 0·1	− 0·13	+ 0·55	− 0·02	+ 0·51	
30	,,	− 4·6	− 0·1	− 0·14	+ 0·55	− 0·02	+ 0·49	
31	,,	− 4·8	− 0·1	− 0·09	+ 0·54	− 0·05	+ 0·48	89 R. P. L. and Polaris.
June 1	,,	− 4·9	− 0·1	− 0·17	+ 0·62	+ 0·03	+ 0·50	

Instrumental Corrections adopted in 1878.

Date.	Observer.	Index.	Run in 5′.	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining Stars.
		″	″	s	s	s	s	
June 3	M	− 4·5	− 0·1	− 0·15	+ 0·59	0·00	+ 0·55	
4	,,	− 4·2	− 0·1	− 0·19	+ 0·62	− 0·01	+ 0·58	
5	,,	− 3·6	− 0·1	− 0·21	+ 0·64	+ 0·01	+ 0·60	
6	,,	− 4·4	− 0·1	− 0·26	+ 0·60	− 0·01	+ 0·63	
7	,,	− 5·0	− 0·1	− 0·26	+ 0·60	− 0·03	+ 0·65	Polaris and 12 Can. Ven.
8	,,	− 4·6	− 0·1	− 0·17	+ 0·63	− 0·01	+ 0·65	
10	,,	− 4·8	− 0·1	− 0·14	+ 0·62	− 0·01	+ 0·66	
11	,,	− 4·9	− 0·1	− 0·14	+ 0·60	− 0·02	+ 0·67	
12	,,	− 3·7	− 0·1	− 0·12	+ 0·62	− 0·01	+ 0·67	Polaris and δ Ophiuchi.
13	,,	− 4·8	− 0·1	− 0·13	+ 0·62	− 0·01	+ 0·65	
15	,,	− 3·4	− 0·1	− 0·23	+ 0·62	− 0·01	+ 0·62	99 R. P. L. and Polaris.
17	R	− 3·9	0·0	− 0·25	+ 0·58	0·00	+ 0·62	
18	,,	− 3·6	0·0	− 0·23	+ 0·59	− 0·01	+ 0·62	
19	,,	− 4·1	0·0	− 0·16	+ 0·59	0·00	+ 0·62	
20	,,	− 4·0	0·0	0·00	+ 0·62	− 0·01	+ 0·62	
21	,,	− 4·8	0·0	+ 0·01	+ 0·59	− 0·01	+ 0·62	
22	,,	− 3·9	0·0	− 0·10	+ 0·58	− 0·01	+ 0·62	
24	,,	− 4·3	0·0	− 0·12	+ 0·55	− 0·01	+ 0·61	
25	,,	− 4·5	0·0	− 0·08	+ 0·55	0·00	+ 0·61	
26	,,	− 4·0	0·0	+ 0·03	+ 0·54	0·00	+ 0·61	
27	,,	− 4·5	0·0	+ 0·01	+ 0·52	0·00	+ 0·61	
28	,,	− 5·0	0·0	− 0·10	+ 0·54	0·00	+ 0·61	
29	,,	− 4·3	0·0	− 0·09	+ 0·54	− 0·01	+ 0·60	
July 2	,,	− 3·9	+ 0·5	− 0·23	+ 0·45	− 0·01	+ 0·60	
4	,,	− 3·1	+ 0·5	− 0·18	+ 0·62	+ 0·02	+ 0·60	
6	,,	− 3·6	+ 0·5	− 0·00	+ 0·42	− 1·78	+ 0·60	ε Urs. Min. and Polaris.
8	,,	− 3·4	+ 0·5	− 0·15	+ 0·40	− 0·01	+ 0·61	
9	,,	− 3·4	+ 0·5	− 0·15	+ 0·36	0·00	+ 0·61	115 and 34 R. P. L.
10	,,	− 4·1	+ 0·5	− 0·05	+ 0·39	− 0·03	+ 0·63	
11	,,	− 3·3	+ 0·5	− 0·04	+ 0·37	0·00	+ 0·65	
12	,,	− 3·7	+ 0·5	− 0·21	+ 0·39	0·00	+ 0·67	
13	,,	− 3·6	+ 0·5	− 0·38	+ 0·46	+ 0·03	+ 0·69	111 and 35 R. P. L.
15	,,	− 2·1	+ 0·5	− 0·48	+ 0·43	− 0·02	+ 0·68	
16	,,	− 3·5	+ 0·5	− 0·54	+ 0·45	+ 0·02	+ 0·68	
23	,,	− 5·3	+ 0·5	− 0·31	+ 0·32	+ 0·01	+ 0·66	
24	,,	− 5·0	+ 0·5	− 0·30	+ 0·38	+ 0·01	+ 0·66	
27	,,	− 3·2	+ 0·5	− 0·33	+ 0·42	0·00	+ 0·65	
Aug. 3	M	− 5·3	0·0	− 0·31	+ 0·40	+ 0·01	+ 0·64	
5	,,	− 3·4	0·0	− 0·29	+ 0·42	− 0·01	+ 0·63	
6	,,	− 3·7	0·0	− 0·29	+ 0·44	0·00	+ 0·63	
9	,,	− 4·2	0·0	− 0·32	+ 0·43	+ 0·03	+ 0·62	
12	,,	− 3·6	0·0	− 0·41	+ 0·42	+ 0·04	+ 0·61	
13	R	− 3·2	0·0	− 0·37	+ 0·39	0·00	+ 0·61	
14	,,	− 2·3	0·0	− 0·28	+ 0·38	+ 0·01	+ 0·60	
15	,,	− 1·6	0·0	− 0·22	+ 0·36	+ 0·02	+ 0·60	131 and 43 R. P. L.
16	,,	− 2·0	0·0	− 0·22	+ 0·35	+ 0·03	+ 0·59	
17	,,	+ 0·1	0·0	− 0·23	+ 0·35	+ 0·02	+ 0·58	
19	,,	+ 0·1	0·0	− 0·21	+ 0·34	+ 0·01	+ 0·56	δ Urs. Min. and 40 R. P. L.
20	,,	+ 0·2	0·0	− 0·24	+ 0·36	0·00	+ 0·56	
21	,,	− 0·3	0·0	− 0·27	+ 0·34	0·00	+ 0·56	
22	,,	+ 0·9	0·0	− 0·25	+ 0·38	+ 0·03	+ 0·56	
23	,,	+ 1·5	0·0	− 0·27	+ 0·34	+ 0·01	+ 0·55	
24	,,	+ 0·7	0·0	− 0·31	+ 0·37	+ 0·01	+ 0·55	
26	,,	+ 0·6	0·0	− 0·29	+ 0·34	+ 0·01	+ 0·55	143 and 49 R. P. L.
28	,,	+ 2·2	0·0	− 0·21	+ 0·37	+ 0·03	+ 0·54	
29	,,	+ 0·4	0·0	− 0·24	+ 0·35	+ 0·01	+ 0·54	
30	,,	− 0·2	0·0	− 0·26	+ 0·38	+ 0·01	+ 0·53	

Instrumental Corrections adopted in 1878.

Date.	Observer.	Index.	Run in 5′.	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining Stars.
		″	″	s	s	s	s	
Aug. 31	R	− 0·1	0·0	− 0·24	+ 0·36	0·00	+ 0·53	
Sep. 2	„	+ 0·1	− 0·1	− 0·32	+ 0·37	+ 0·01	+ 0·52	
3	„	+ 0·8	− 0·1	− 0·32	+ 0·36	0·00	+ 0·52	143 and 49 R. P. L.
4	„	+ 0·1	− 0·1	− 0·32	+ 0·36	+ 0·01	+ 0·52	
10	„	+ 1·6	− 0·1	− 0·38	+ 0·31	+ 0·02	+ 0·55	
12	„	+ 3·1	− 0·1	− 0·38	+ 0·27	+ 0·01	+ 0·56	
16	C R	+ 3·9	− 0·1	− 0·46	+ 0·30	+ 0·01	+ 0·58	
17	R	+ 3·7	− 0·1	− 0·37	+ 0·32	+ 0·02	+ 0·58	
18	„	+ 3·1	− 0·1	− 0·34	+ 0·29	+ 0·01	+ 0·58	
19	„	+ 2·9	− 0·1	− 0·42	+ 0·31	0·00	+ 0·59	
20	„	+ 2·0	− 0·1	− 0·50	+ 0·28	0·00	+ 0·59	
21	„	+ 1·9	− 0·1	− 0·52	+ 0·32	0·00	+ 0·60	
23	„	+ 0·6	− 0·1	− 0·42	+ 0·32	0·00	+ 0·61	
24	„	+ 1·8	− 0·1	− 0·36	+ 0·32	+ 0·01	+ 0·61	150 and 70 R. P. L.
25	„	+ 1·3	− 0·1	− 0·32	+ 0·34	+ 0·01	+ 0·61	
26	„	+ 1·8	− 0·1	− 0·32	+ 0·31	− 0·01	+ 0·61	
27	„	+ 0·2	− 0·1	− 0·23	+ 0·32	+ 0·01	+ 0·62	
28	„	+ 1·2	− 0·1	− 0·19	+ 0·32	0·00	+ 0·62	
30	„	− 0·2	− 0·1	− 0·24	+ 0·32	+ 0·01	+ 0·63	α Cygni and 49 R. P. L.
Oct. 1	„	− 0·4	+ 0·4	− 0·25	+ 0·39	+ 0·01	+ 0·64	
2	„	+ 0·8	+ 0·4	− 0·28	+ 0·37	− 0·01	+ 0·65	
3	„	+ 0·4	+ 0·4	− 0·38	+ 0·36	+ 0·02	+ 0·66	
4	„	0·0	+ 0·4	− 0·26	+ 0·40	+ 0·06	+ 0·67	
5	„	+ 0·8	+ 0·4	− 0·11	+ 0·34	+ 0·02	+ 0·68	
8	„	+ 3·2	+ 0·4	− 0·33	+ 0·32	+ 0·05	+ 0·71	150 and 72 R. P. L.
11	„	+ 2·9	+ 0·4	− 0·36	+ 0·34	+ 0·04	+ 0·68	
12	„	+ 2·9	+ 0·4	− 0·39	+ 0·34	+ 0·04	+ 0·67	
15	„	+ 2·9	+ 0·4	− 0·43	+ 0·32	+ 0·02	+ 0·64	
17	„	+ 3·2	+ 0·4	− 0·44	+ 0·37	+ 0·01	+ 0·62	150 and 79 R. P. L.
18	„	+ 3·5	+ 0·4	− 0·41	+ 0·40	+ 0·04	+ 0·61	
19	„	+ 3·1	+ 0·4	− 0·36	+ 0·39	+ 0·03	+ 0·60	150 R. P. L. & Fomalhaut
21	„	+ 2·5	+ 0·4	− 0·41	+ 0·36	0·00	+ 0·63	
22	„	+ 2·4	+ 0·4	− 0·40	+ 0·39	+ 0·02	+ 0·65	150 and 72 R. P. L.
23	„	+ 1·5	+ 0·4	− 0·42	+ 0·38	− 0·01	+ 0·64	
24	„	+ 1·3	+ 0·4	− 0·48	+ 0·43	+ 0·02	+ 0·64	
25	„	+ 0·7	+ 0·4	− 0·42	+ 0·45	+ 0·04	+ 0·63	
26	„	+ 0·1	+ 0·4	− 0·39	+ 0·44	+ 0·02	+ 0·62	
29	„	− 0·1	+ 0·4	− 0·46	+ 0·32	− 0·02	+ 0·60	
Nov. 2	„	− 1·3	+ 0·4	− 0·41	+ 0·33	− 0·02	+ 0·57	150 and 79 R. P. L.
5	M	− 1·4	+ 0·1	− 0·29	+ 0·39	+ 0·02	+ 0·61	
6	„	− 2·5	+ 0·1	− 0·36	+ 0·38	+ 0·01	+ 0·62	150 and 79 R. P. L.
8	„	− 1·4	+ 0·1	− 0·32	+ 0·40	+ 0·01	+ 0·52	
9	„	− 2·7	+ 0·1	− 0·30	+ 0·39	− 0·02	+ 0·47	150 and 93 R. P. L.
11	„	− 2·5	+ 0·1	− 0·40	+ 0·40	0·00	+ 0·53	
12	„	− 3·4	+ 0·1	− 0·40	+ 0·36	− 0·04	+ 0·56	
14	„	− 3·9	+ 0·1	− 0·61	+ 0·42	+ 0·01	+ 0·62	150 and 89 R. P. L.
15	„	− 0·2	+ 0·1	− 0·65	+ 0·23	− 0·04	+ 0·54	150 and 72 R. P. L.
16	„	− 0·6	+ 0·1	− 0·66	+ 0·11	− 0·01	+ 0·55	
21	„	− 1·1	+ 0·1	− 0·74	+ 0·04	− 0·01	+ 0·59	150 and 89 R. P. L.
22	„	− 0·8	+ 0·1	− 0·67	+ 0·06	0·00	+ 0·56	
25	„	− 1·2	+ 0·1	− 0·46	+ 0·04	− 0·01	+ 0·47	Polaris and 99 R. P. L.
26	„	− 1·1	+ 0·1	− 0·50	+ 0·05	− 0·01	+ 0·47	
27	„	− 1·8	+ 0·1	− 0·68	+ 0·05	− 0·01	+ 0·47	Polaris and 99 R. P. L.
28	„	− 1·9	+ 0·1	− 0·80	+ 0·07	0·00	+ 0·48	
29	„	− 1·4	+ 0·1	− 0·78	+ 0·07	0·00	+ 0·50	

Instrumental Corrections adopted in 1878.

Date.	Observer.	Index.	Run in 5′.	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining Stars.
		″	″	*s*	*s*	*s*	*s*	
Dec. 2	R	− 0·6	+ 0·1	− 0·70	+ 0·08	0·00	+ 0·54	
6	,,	+ 0·8	+ 0·1	− 0·55	+ 0·07	0·00	+ 0·60	
7	,,	− 0·6	+ 0·1	− 0·57	+ 0·09	− 0·01	+ 0·61	33 and 114 R. P. L.
9	,,	+ 0·1	+ 0·1	− 0·64	+ 0·07	0·00	+ 0·61	
11	,,	− 0·9	+ 0·1	− 0·57	+ 0·09	+ 0·01	+ 0·61	
12	,,	− 0·1	+ 0·1	− 0·62	+ 0·08	0·00	+ 0·61	
13	,,	− 0·3	+ 0·1	− 0·62	+ 0·09	0·00	+ 0·61	
14	,,	− 0·3	+ 0·1	− 0·56	+ 0·08	0·00	+ 0·61	
16	,,	− 0·1	+ 0·1	− 0·62	+ 0·06	0·00	+ 0·61	
18	,,	− 1·5	+ 0·1	− 0·66	+ 0·03	0·00	+ 0·61	
20	,,	+ 0·2	+ 0·1	− 0·81	− 0·05	0·00	+ 0·61	
21	,,	− 1·5	+ 0·1	− 0·84	− 0·05	+ 0·01	+ 0·61	33 and 114 R. P. L.
28	,,	− 0·8	+ 0·1	− 0·49	0·00	0·00	+ 0·45	35 and 115 R. P. L.
31	C. R.	− 3·1	+ 0·1	− 0·40	− 0·15	− 0·08	+ 0·50	

Nov. 15.—Cleaned and oiled the pivots and adjusted the levelling screws. Cleaned and adjusted the microscopes.

Dec. 31.—The clock was put back one minute at 5*h*. 0*m*. S. T. and the weight on the pendulum shelf was reduced from 35 to 25 grains.

Instrumental Corrections adopted in 1879.

Date.	Observer.	Index.	Run in 5′.	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining Stars.
		″	″	s	s	s	s	
Jan. 4	M	− 3·1	+ 0·2	+ 0·15	− 0·07	0·00	+ 0·58	
7	,,	− 3·0	+ 0·2	+ 0·36	− 0·02	+ 0·04	+ 0·63	Polaris and 111 R. P. L.
8	,,	− 4·0	+ 0·2	+ 0·31	− 0·06	+ 0·02	+ 0·62	
9	,,	− 2·3	+ 0·2	+ 0·25	− 0·06	+ 0·02	+ 0·62	
10	,,	− 4·3	+ 0·2	+ 0·33	− 0·08	0·00	+ 0·61	34 and 115 R. P. L.
11	,,	− 3·0	+ 0·2	+ 0·33	− 0·09	0·00	+ 0·60	
13	,,	− 3·0	+ 0·2	+ 0·07	− 0·11	− 0·03	+ 0·58	
14	R	− 2·8	+ 0·2	+ 0·23	− 0·07	+ 0·01	+ 0·57	
15	M	− 3·3	+ 0·2	+ 0·35	− 0·05	+ 0·03	+ 0·56	
16	,,	− 3·6	+ 0·2	+ 0·24	− 0·07	0·00	+ 0·55	43 R. P. L. & ε Urs. Min.
17	,,	− 2·9	+ 0·2	+ 0·37	− 0·08	0·00	+ 0·54	
18	,,	− 3·1	+ 0·2	+ 0·40	− 0·12	− 0·03	+ 0·54	
20	,,	− 3·0	+ 0·2	+ 0·23	− 0·12	− 0·04	+ 0·53	33 R. P. L. & ε Urs. Min.
23	,,	− 2·9	+ 0·2	+ 0·15	− 0·10	− 0·02	+ 0·51	40 R. P. L. & ε Urs. Min.
24	,,	− 1·7	+ 0·2	+ 0·28	− 0·06	+ 0·02	+ 0·52	
25	,,	− 1·7	+ 0·2	+ 0·41	− 0·04	+ 0·01	+ 0·54	40 R. P. L. & ε Urs. Min.
27	,,	− 3·1	+ 0·2	+ 0·30	− 0·11	− 0·04	+ 0·53	
28	,,	− 3·8	+ 0·2	+ 0·27	− 0·08	+ 0·01	+ 0·52	40 R. P. L. & ε Urs. Min.
29	,,	− 3·2	+ 0·2	+ 0·33	− 0·10	0·00	+ 0·51	
30	,,	− 3·7	+ 0·2	+ 0·41	− 0·11	− 0·02	+ 0·50	40 R. P. L. & ε Urs. Min.
31	,,	− 3·1	+ 0·2	+ 0·31	− 0·14	− 0·05	+ 0·51	
Feb. 1	R	− 4·6	0·0	+ 0·24	− 0·15	− 0·02	+ 0·52	
3	,,	− 1·9	0·0	+ 0·34	− 0·16	− 0·02	+ 0·54	
4	,,	− 2·6	0·0	+ 0·29	− 0·15	− 0·02	+ 0·54	
5	,,	− 2·8	0·0	+ 0·38	− 0·11	0·00	+ 0·55	
6	,,	− 3·8	0·0	+ 0·44	− 0·13	− 0·01	+ 0·55	
7	,,	− 4·3	0·0	+ 0·37	− 0·15	− 0·01	+ 0·57	43 R. P. L. & 24 Urs. Min.
8	,,	− 3·4	0·0	+ 0·43	− 0·11	0·00	+ 0·57	
10	,,	− 4·2	0·0	+ 0·48	− 0·11	− 0·01	+ 0·56	
11	,,	− 4·3	0·0	+ 0·50	− 0·09	− 0·01	+ 0·56	
12	,,	− 4·2	0·0	+ 0·52	− 0·06	0·00	+ 0·56	
13	,,	− 5·5	0·0	+ 0·47	− 0·04	− 0·01	+ 0·55	
14	,,	− 4·3	0·0	+ 0·49	− 0·01	0·00	+ 0·55	43 R. P. L. & 24 Urs. Min.
15	,,	− 5·1	0·0	+ 0·48	− 0·01	0·00	+ 0·56	
17	,,	− 4·8	0·0	+ 0·41	− 0·01	0·00	+ 0·57	
18	,,	− 5·1	0·0	+ 0·45	− 0·04	0·00	+ 0·58	
19	,,	− 4·4	0·0	+ 0·44	0·00	+ 0·01	+ 0·59	
20	,,	− 4·3	0·0	+ 0·41	+ 0·01	+ 0·01	+ 0·59	
21	,,	− 5·9	0·0	+ 0·33	− 0·02	0·00	+ 0·60	49 R. P. L. and 15 Argûs.
22	,,	− 4·6	0·0	+ 0·34	+ 0·01	0·00	+ 0·59	
24	,,	− 3·5	0·0	+ 0·50	− 0·01	0·00	+ 0·57	
25	,,	− 4·2	0·0	+ 0·48	− 0·03	− 0·01	+ 0·57	
26	,,	− 4·8	0·0	+ 0·48	+ 0·03	+ 0·01	+ 0·56	
27	,,	− 4·3	0·0	+ 0·63	0·00	+ 0·01	+ 0·55	
28	,,	− 5·9	0·0	+ 0·57	+ 0·03	+ 0·01	+ 0·54	49 and 131 R. P. L.
Mar. 1	,,	− 4·4	+ 0·1	+ 0·63	+ 0·06	+ 0·01	+ 0·53	
3	M	− 2·8	+ 0·1	+ 0·41	+ 0·01	− 0·07	+ 0·50	
4	,,	− 4·6	+ 0·1	+ 0·33	+ 0·12	+ 0·02	+ 0·48	51 Cephei and δ Urs. Min.
5	,,	− 4·5	+ 0·1	+ 0·35	+ 0·04	− 0·04	+ 0·54	
6	,,	− 4·1	+ 0·1	+ 0·43	+ 0·10	+ 0·03	+ 0·60	60 R. P. L. and λ Urs. Min.
7	,,	− 4·2	+ 0·1	+ 0·54	+ 0·05	− 0·03	+ 0·57	
8	,,	− 4·1	+ 0·1	+ 0·53	+ 0·07	− 0·01	+ 0·55	
10	,,	− 4·5	+ 0·1	+ 0·22	+ 0·03	− 0·05	+ 0·50	60 and 150 R. P. L.
11	,,	− 4·2	+ 0·1	+ 0·17	+ 0·06	− 0·02	+ 0·50	
12	,,	− 4·1	+ 0·1	+ 0·53	+ 0·07	− 0·01	+ 0·50	
13	,,	− 3·9	+ 0·1	+ 0·51	+ 0·05	− 0·03	+ 0·50	51 Cephei and δ Urs. Min.

Instrumental Corrections adopted in 1879.

Date.	Observer.	Index.	Run in 5′.	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining Stars.
		″	″	s	s	s	s	
Mar. 14	M	− 4·0	+ 0·1	+ 0·31	+ 0·07	0·00	+ 0·48	
15	,,	− 4·1	+ 0·1	+ 0·35	+ 0·08	− 0·01	+ 0·46	
17	,,	− 4·7	+ 0·1	+ 0·37	+ 0·06	− 0·02	+ 0·43	70 R.P.L.& γ CanisMajoris.
19	,,	− 3·7	+ 0·1	+ 0·42	+ 0·10	0·00	+ 0·44	
22	,,	− 4·0	+ 0·1	+ 0·39	+ 0·04	− 0·04	+ 0·46	70 and 150 R. P. L.
24	,,	− 3·8	+ 0·1	+ 0·49	+ 0·07	− 0·01	+ 0·50	
25	,,	− 2·9	+ 0·1	+ 0·55	+ 0·08	− 0·01	+ 0·51	70 and 150 R. P. L.
26	,,	− 2·9	+ 0·1	+ 0·53	+ 0·09	+ 0·01	+ 0·49	
27	,,	− 3·6	+ 0·1	+ 0·53	+ 0·09	0·00	+ 0·47	72 and 150 R. P. L.
28	,,	− 2·8	+ 0·1	+ 0·42	+ 0·07	− 0·02	+ 0·45	
29	,,	− 2·6	+ 0·1	+ 0·36	+ 0·08	− 0·01	+ 0·43	70 R. P. L. and 15 Argûs.
31	,,	− 3·0	+ 0·1	+ 0·09	+ 0·09	+ 0·01	+ 0·40	70 R.P.L.& ε CanisMajoris.
Apl. 1	R	− 2·9	− 0·1	+ 0·19	+ 0·07	0·00	+ 0·54	60 and 151 R. P. L.
2	,,	− 2·4	− 0·1	+ 0·47	+ 0·08	0·00	+ 0·53	
3	,,	− 3·4	− 0·1	+ 0·42	+ 0·08	0·00	+ 0·52	
4	,,	− 2·8	− 0·1	+ 0·41	+ 0·09	0·00	+ 0·51	
5	,,	− 2·7	− 0·1	+ 0·44	+ 0·11	0·00	+ 0·51	
7	,,	− 2·2	− 0·1	+ 0·48	+ 0·10	− 0·01	+ 0·49	
8	,,	− 1·8	− 0·1	+ 0·47	+ 0·11	− 0·01	+ 0·48	72 and 150 R. P. L.
9	,,	− 1·0	− 0·1	+ 0·49	+ 0·10	− 0·01	+ 0·49	
12	,,	− 2·1	− 0·1	+ 0·66	+ 0·12	− 0·01	+ 0·50	
14	M	− 2·0	− 0·1	+ 0·51	+ 0·09	− 0·05	+ 0·51	
16	R	− 2·1	− 0·1	+ 0·51	+ 0·18	− 0·02	+ 0·52	
17	,,	− 2·4	− 0·1	+ 0·47	+ 0·16	− 0·02	+ 0·53	
18	,,	− 1·8	− 0·1	+ 0·39	+ 0·18	− 0·01	+ 0·53	
19	,,	− 1·6	− 0·1	+ 0·42	+ 0·17	− 0·01	+ 0·53	89 R. P. L. and α Hydræ.
21	,,	− 1·6	− 0·1	+ 0·44	+ 0·16	− 0·01	+ 0·50	
22	,,	− 1·4	− 0·1	+ 0·48	+ 0·17	− 0·01	+ 0·50	
23	,,	− 0·6	− 0·1	+ 0·51	+ 0·20	− 0·01	+ 0·49	
24	,,	− 0·5	− 0·1	+ 0·47	+ 0·16	0·00	+ 0·48	70 and 158 R. P. L.
25	,,	− 1·2	− 0·1	+ 0·54	+ 0·18	0·00	+ 0·47	
26	,,	− 0·7	− 0·1	+ 0·58	+ 0·17	− 0·01	+ 0·46	
28	,,	− 0·7	− 0·1	+ 0·51	+ 0·17	− 0·01	+ 0·43	
29	,,	− 0·9	− 0·1	+ 0·54	+ 0·18	0·00	+ 0·42	
30	,,	− 1·0	− 0·1	+ 0·53	+ 0·19	+ 0·01	+ 0·41	
May 1	,,	− 0·8	− 0·1	+ 0·70	+ 0·20	+ 0·01	+ 0·40	72 and 150 R. P. L.
2	M	− 0·9	0·0	+ 0·68	+ 0·26	+ 0·05	+ 0·45	
3	,,	+ 0·3	0·0	+ 0·46	+ 0·25	+ 0·02	+ 0·49	70 and 150 R. P. L.
5	,,	+ 0·4	0·0	+ 0·56	+ 0·30	+ 0·07	+ 0·49	
6	,,	+ 0·7	0·0	+ 0·57	+ 0·32	+ 0·07	+ 0·50	
7	,,	− 0·3	0·0	+ 0·56	+ 0·31	+ 0·07	+ 0·50	70 and 158 R. P. L.
8	,,	+ 0·7	0·0	+ 0·60	+ 0·30	+ 0·05	+ 0·52	
9	,,	+ 0·1	0·0	+ 0·57	+ 0·28	+ 0·03	+ 0·53	
10	,,	− 0·1	0·0	+ 0·54	+ 0·28	+ 0·05	+ 0·55	99 and 150 R. P. L.
12	,,	+ 3·0	0·0	+ 0·68	+ 0·32	− 0·13	+ 0·51	
13	,,	+ 3·5	0·0	+ 0·66	+ 0·29	− 0·16	+ 0·49	89 and 158 R. P. L.
14	,,	+ 4·0	0·0	+ 0·64	+ 0·27	− 0·18	+ 0·49	
15	,,	+ 4·0	0·0	+ 0·61	+ 0·22	− 0·22	+ 0·50	
16	,,	+ 3·8	0·0	+ 0·54	+ 0·27	+ 0·05	+ 0·50	89 and 158 R. P. L.
17	,,	+ 3·7	0·0	+ 0·50	+ 0·29	+ 0·06	+ 0·52	
22	,,	+ 7·2	0·0	+ 0·59	+ 0·18	+ 0·06	+ 0·62	
24	,,	+ 7·8	0·0	+ 0·55	+ 0·05	− 0·05	+ 0·66	99 R. P. L. and Polaris
26	,,	+ 8·5	0·0	+ 0·60	+ 0·08	− 0·08	+ 0·66	
27	,,	+ 8·0	0·0	+ 0·56	+ 0·09	− 0·06	+ 0·66	
28	,,	+ 6·8	0·0	+ 0·44	+ 0·13	− 0·05	+ 0·66	

March 19—22.—1·60 inches of rain fell.
May 12.—Object glass cleaned. Pivots oiled but not cleaned.
May 19—21.—A cyclone passed over Madras. Rainfall 4·42 inches.

Instrumental Corrections adopted in 1879.

Date.	Observer.	Index.	Run in 5′.	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining Stars.
		″	″	*s*	*s*	*s*	*s*	
June 3	R	+ 6·5	0·0	+ 0·49	+ 0·20	− 0·04	+ 0·67	108 and 12 R. P. L.
6	,,	+ 5·4	0·0	+ 0·57	+ 0·20	− 0·02	+ 0·61	
7	,,	+ 6·4	0·0	+ 0·56	+ 0·18	− 0·03	+ 0·59	
9	,,	+ 4·6	0·0	+ 0·54	+ 0·19	− 0·02	+ 0·54	
11	,,	+ 4·5	0·0	+ 0·60	+ 0·20	− 0·03	+ 0·50	
12	,,	+ 5·0	0·0	+ 0·68	+ 0·20	− 0·04	+ 0·48	103 and 12 R. P. L.
13	,,	+ 1·9	0·0	+ 0·70	+ 0·20	− 0·02	+ 0·48	
14	,,	+ 5·8	0·0	+ 0·61	+ 0·20	− 0·04	+ 0·49	
16	,,	+ 4·8	0·0	+ 0·48	+ 0·20	− 0·01	+ 0·49	
18	,,	+ 5·2	0·0	+ 0·54	+ 0·19	− 0·02	+ 0·50	
19	,,	+ 5·4	0·0	+ 0·53	+ 0·20	− 0·02	+ 0·50	
20	,,	+ 4·5	0·0	+ 0·52	+ 0·21	− 0·02	+ 0·50	
21	,,	+ 5·0	0·0	+ 0·52	+ 0·21	− 0·02	+ 0·51	
23	,,	+ 4·6	0·0	+ 0·50	+ 0·19	− 0·01	+ 0·51	
27	,,	+ 3·9	0·0	+ 0·55	+ 0·19	− 0·02	+ 0·52	
30	,,	+ 4·5	0·0	+ 0·80	+ 0·18	− 0·03	+ 0·53	
July 2	M	+ 3·7	+ 0·3	+ 0·77	+ 0·13	− 0·08	+ 0·54	
4	,,	+ 4·4	+ 0·4	+ 0·59	+ 0·17	+ 0·01	+ 0·54	
7	,,	+ 4·1	+ 0·3	+ 0·49	+ 0·19	0·00	+ 0·55	
8	,,	+ 3·0	+ 0·3	+ 0·44	+ 0·19	− 0·01	+ 0·55	
9	,,	+ 3·9	+ 0·3	− 0·67	+ 0·22	+ 0·02	+ 0·50	
10	R	+ 5·4	+ 0·3	− 1·10	+ 0·20	+ 0·02	+ 0·56	116 and 34 R. P. L.
11	M	+ 3·3	+ 0·3	− 0·59	+ 0·21	+ 0·02	+ 0·56	
12	,,	+ 4·2	+ 0·3	− 0·62	+ 0·17	− 0·02	+ 0·55	
15	,,	+ 3·9	+ 0·3	− 0·59	+ 0·21	0·00	+ 0·54	δ Urs. Min. and 40 R. P. L.
24	,,	+ 6·6	+ 0·3	− 0·20	+ 0·25	+ 0·07	+ 0·67	δ Urs.Min. and α Herculis.
25	,,	+ 7·8	+ 0·3	− 0·36	+ 0·20	+ 0·01	+ 0·67	
26	,,	+ 6·4	+ 0·3	− 0·50	+ 0·19	+ 0·02	+ 0·67	
31	,,	+ 5·5	+ 0·3	− 0·54	+ 0·16	− 0·02	+ 0·69	
Aug. 1	R	+ 4·8	0·0	− 0·55	+ 0·15	0·00	+ 0·69	
5	,,	+ 5·1	0·0	− 0·13	+ 0·16	+ 0·03	+ 0·70	
6	,,	+ 4·5	0·0	− 0·22	+ 0·16	+ 0·02	+ 0·70	
7	,,	+ 3·5	0·0	− 0·29	+ 0·17	+ 0·02	+ 0·70	
9	,,	+ 3·4	0·0	− 0·22	+ 0·16	+ 0·02	+ 0·71	
11	,,	+ 3·6	0·0	− 0·24	+ 0·16	+ 0·02	+ 0·71	
12	,,	+ 3·5	0·0	− 0·13	+ 0·18	+ 0·03	+ 0·72	
13	,,	+ 4·2	0·0	0·00	+ 0·17	+ 0·01	+ 0·72	
14	,,	+ 3·5	0·0	− 0·06	+ 0·19	+ 0·02	+ 0·72	δ Urs. Min. and 51 Cephei.
16	,,	+ 4·6	0·0	− 0·26	+ 0·15	+ 0·01	+ 0·73	
19	,,	+ 6·2	0·0	− 0·22	+ 0·06	+ 0·04	+ 0·75	
20	,,	+ 5·5	0·0	− 0·22	+ 0·03	+ 0·04	+ 0·76	
21	,,	+ 5·8	0·0	− 0·27	+ 0·03	+ 0·02	+ 0·77	
23	,,	+ 7·9	0·0	− 0·26	+ 0·08	+ 0·03	+ 0·78	141 and 49 R. P. L.
25	,,	+ 7·8	0·0	− 0·10	+ 0·09	+ 0·02	+ 0·77	
27	,,	+ 7·7	0·0	+ 0·14	+ 0·09	+ 0·03	+ 0·77	
28	,,	+ 8·3	0·0	+ 0·14	+ 0·08	+ 0·03	+ 0·76	
Sep. 1	,,	+ 8·8	0·0	− 0·19	0·00	+ 0·02	+ 0·74	
2	,,	+ 8·9	0·0	− 0·17	+ 0·02	+ 0·02	+ 0·74	141 and 49 R. P. L.
3	,,	+ 7·9	0·0	− 0·10	+ 0·06	+ 0·02	+ 0·73	
4	,,	+ 10·2	0·0	− 0·02	+ 0·09	+ 0·02	+ 0·73	
8	M	+ 8·6	0·0	0·00	+ 0·15	+ 0·03	+ 0·71	
13	R	+ 4·9	0·0	− 0·16	+ 0·18	+ 0·02	+ 0·68	
15	,,	+ 5·8	0·0	− 0·11	+ 0·19	+ 0·03	+ 0·67	
16	,,	+ 6·6	0·0	− 0·07	+ 0·19	+ 0·03	+ 0·67	
17	,,	+ 3·7	0·0	+ 0·05	+ 0·20	+ 0·04	+ 0·66	

On July 9 at 9*h*. 45*m*. S. T. the clock was put back one minute and the rate reduced.
July 24.—Collimators cleaned. Pivots cleaned and oiled.

Instrumental Corrections adopted in 1879.

Date.	Observer.	Index.	Run in 5′.	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining Stars.
		″	″	s	s	s	s	
Sep. 18	R	+ 3·9	0·0	+0·12	+0·22	+0·02	+0·66	
19	,,	+ 4·2	0·0	0·00	+0·21	0·00	+0·65	
20	,,	+ 2·2	0·0	−0·13	+0·20	+0·01	+0·65	141 and 49 R. P. L.
24	,,	+ 1·5	0·0	−0·18	+0·20	+0·01	+0·65	
25	,,	+ 0·9	0·0	−0·16	+0·25	+0·01	+0·65	
26	,,	+ 0·8	0·0	−0·12	+0·27	+0·01	+0·65	141 and 60 R. P. L.
27	,,	+ 0·3	0·0	−0·11	+0·22	+0·01	+0·67	
29	,,	+ 0·9	0·0	−0·15	+0·22	+0·01	+0·71	
30	,,	+ 0·8	0·0	−0·17	+0·23	+0·01	+0·73	
Oct. 2	M	+ 3·0	+ 0·3	−0·26	+0·32	−0·01	+0·77	
3	,,	+ 3·2	+ 0·3	−0·27	+0·32	−0·01	+0·79	
6	,,	+ 8·0	+ 0·3	+0·19	+0·23	+0·04	+0·85	10 and 89 R. P. L.
7	,,	+ 8·2	+ 0·3	+0·11	+0·21	+0·05	+0·88	
8	,,	+ 9·1	+ 0·3	0·00	+0·20	+0·03	+0·90	11 Cephei and 89 R. P. L.
9	,,	+ 9·8	+ 0·3	+0·06	+0·12	+0·03	+0·89	
13	,,	+ 9·4	+ 0·3	+0·11	+0·20	+0·11	+0·85	
14	,,	+ 9·3	+ 0·3	+0·08	+0·15	+0·06	+0·84	158 and 108 R. P. L.
15	,,	+ 7·7	+ 0·3	+0·06	+0·14	+0·05	+0·84	
16	,,	+ 8·6	+ 0·3	+0·07	+0·13	+0·01	+0·84	
17	,,	+ 7·5	+ 0·3	+0·04	+0·14	+0·03	+0·83	
20	,,	+ 8·4	+ 0·3	+0·04	+0·12	0·00	+0·83	
23	,,	+12·6	+ 0·3	+0·06	+0·08	+0·04	+0·82	
25	,,	+12·0	+ 0·3	−0·09	+0·05	+0·01	+0·82	
27	,,	+11·2	+ 0·3	−0·01	+0·15	+0·05	+0·82	
28	,,	+10·1	+ 0·3	+0·05	+0·09	+0·03	+0·82	
31	,,	+14·2	+ 0·3	−0·01	+0·15	0·00	+0·81	
Nov. 1	R	+11·7	0·0	+0·01	+0·01	+0·03	+0·81	
3	,,	+10·7	0·0	+0·05	+0·03	+0·02	+0·81	150 and 69 R. P. L.
4	,,	+10·2	0·0	+0·04	+0·04	+0·02	+0·87	
5	,,	+10·3	0·0	−0·06	+0·02	+0·01	+0·92	
8	,,	+11·5	0·0	−0·17	+0·03	+0·06	+1·09	14 and 99 R. P. L.
10	,,	+ 9·5	0·0	−0·17	+0·02	+0·02	+1·06	
11	,,	+ 9·3	0·0	−0·22	−0·02	+0·02	+1·05	
12	,,	+ 9·9	0·0	−0·26	−0·03	+0·02	+1·04	
19	,,	+12·2	0·0	−0·24	−0·02	+0·01	+0·95	
20	,,	+10·3	0·0	−0·48	+0·03	+0·01	+0·94	14 and 99 R. P. L.
21	,,	+10·4	0·0	−0·42	−0·04	+0·02	−0·03	14 and 99 R. P. L.
22	,,	+ 8·8	0·0	−0·15	−0·22	+0·02	−0·11	
24	,,	− 1·9	0·0	−0·30	−0·21	+0·03	−0·28	
25	,,	− 2·6	0·0	−0·22	−0·20	+0·03	−0·36	2 Urs. Min. and 89 R. P. L.
26	,,	− 2·3	0·0	−0·17	−0·21	+0·03	−0·33	
27	,,	− 4·2	0·0	−0·18	−0·21	+0·04	−0·29	
28	,,	− 4·4	0·0	−0·10	−0·24	+0·04	−0·26	η Piscium and 111 R. P. L.
29	,,	− 2·4	0·0	−0·10	−0·25	+0·04	−0·23	
Dec. 1	,,	− 3·7	0·0	−0·21	−0·26	+0·04	−0·18	
2	,,	− 4·6	0·0	−0·26	−0·28	+0·05	−0·15	
3	,,	− 4·8	0·0	−0·22	−0·25	+0·06	−0·13	
5	,,	− 4·3	0·0	−0·12	−0·22	+0·04	−0·08	
6	,,	− 4·5	0·0	−0·13	−0·24	+0·04	−0·05	14 and 99 R. P. L.
8	,,	− 4·8	0·0	−0·21	−0·24	+0·04	−0·22	
9	,,	− 4·9	0·0	−0·30	−0·28	+0·04	−0·31	
10	,,	− 4·6	0·0	−0·35	−0·27	+0·04	−0·39	
11	,,	− 4·8	0·0	−0·30	−0·28	+0·03	−0·43	35 R. P. L. & R Camelopardi
12	,,	− 5·0	0·0	−0·27	−0·25	+0·04	−0·46	
17	,,	− 7·1	0·0	−0·45	−0·22	+0·04	−0·37	

November 21.—Azimuth adjusted.
November 23.—Collimation and microscopes adjusted.

Instrumental Corrections adopted in 1879.

Date.	Observer.	Index.	Run in 5′.	Clock Rate.	Inclination.	Collimation.	Meridian.	Determining Stars.
		″	″	*s*	*s*	*s*	*s*	
Dec. 18	R	− 5·5	0·0	− 0·48	− 0·20	+ 0·05	− 0·35	
19	,,	− 5·6	0·0	− 0·41	− 0·18	+ 0·04	− 0·33	35 R.P. L. & R Camelopardi.
20	,,	− 5·3	0·0	− 0·30	− 0·18	+ 0·04	− 0·28	35 R.P. L. & R Camelopardi.
26	,,	− 6·2	0·0	− 0·31	− 0·22	+ 0·04	− 0·30	35 and 115 R. P. L.
30	,,	− 5·4	0·0	− 0·38	− 0·23	+ 0·05	− 0·33	40 R. P. L. and ϵ Urs. Min.

− 0·30
·31
·32
·33

Corrections to the Nautical Almanac Stars as given by the Madras Mean Positions.

Stars.	Approximate Place 1878.			1877.			1878.			1879.		
				Obs.	R. A.	P. D.	Obs.	R. A.	P. D.	Obs.	R. A.	P. D.
	h.	*m.*	° ′		*s*	″		*s*	″		*s*	″
α Andromedæ ...	0	2	61 35	2	+ 0·10	+ 0·5	4	+ 0·01	+ 0·8	3	+ 0·08	− 0·7
γ Pegasi (*Algenib*) ...	0	7	75 30	4	− 0·03	+ 0·4	2	+ 0·01	− 0·8	7	+ 0·02	− 1·5
12 Ceti	0	24	94 38	5	− 0·01	− 0·3	1	+ 0·12	− 1·6	3	− 0·06	− 0·3
β Ceti...	0	37	108 39	4	+ 0·05	− 0·5	5	− 0·04	− 2·2	4	+ 0·05	− 2·6
ε Piscium	0	57	82 46	5	− 0·04	− 0·6	9	− 0·02	− 1·1	8	− 0·05	− 2·1
α Urs. Min. (*Polaris*)..	1	14	1 20	9	+ 0·08	+ 2·7	6	− 0·02	− 1·1	2	− 1·42	+ 1·3
θ Ceti	1	18	98 49	4	0·00	− 0·5	8	+ 0·04	− 1·1	4	+ 0·04	− 1·1
η Piscium	1	25	75 17	4	+ 0·04	+ 0·1	8	− 0·04	+ 0·1	9	− 0·02	− 0·4
ν Piscium	1	35	85 8	4	0·00	− 0·6	9	− 0·04	− 2·2	7	+ 0·01	− 1·2
β Arietis	1	48	69 47	3	+ 0·02	+ 0·5	9	+ 0·04	+ 0·6	6	0·00	+ 0·1
α Arietis	2	0	67 7	3	− 0·06	+ 1·0	11	− 0·03	+ 0·1	7	− 0·01	− 0·5
67 Ceti	2	11	96 59	...	.....	.....	8	+ 0·03	− 2·3	16	+ 0·06	− 2·7
ξ^2 Ceti	2	22	82 5	1	− 0·10	− 1·9	3	0·00	− 1·7	9	+ 0·03	− 0·9
γ^2 Ceti	2	37	87 17	4	+ 0·07	− 1·1	6	+ 0·01	− 0·7	2	0·00	− 1·3
α Ceti...	2	56	86 23	4	+ 0·03	− 2·5	8	− 0·01	− 2·2	2	+ 0·04	− 3·0
δ Arietis	3	5	70 44	5	+ 0·02	+ 0·4	3	+ 0·03	+ 1·0	4	+ 0·07	+ 0·1
α Persei	3	16	40 34	...	.....	.....	...	.....	.....	1	+ 0·04	− 0·7
ε Eridani	3	27	99 52	4	+ 0·19	− 1·1	...	.....	.....	...	.....	.....
η Tauri	3	40	66 16	6	+ 0·01	+ 0·2	8	+ 0·02	+ 1·1	2	− 0·10	− 0·7
γ^1 Eridani	3	52	103 51	7	+ 0·01	− 0·2	8	+ 0·02	− 0·5	4	0·00	− 0·8
o^1 Eridani	4	6	97 9	5	− 0·02	− 1·1	1	+ 0·04	− 3·1	4	− 0·03	− 1·7
ε Tauri	4	21	71 6	10	+ 0·01	+ 0·4	7	− 0·02	+ 0·6	6	− 0·02	+ 0·7
α Tauri (*Aldebaran*)...	4	29	73 44	4	+ 0·03	− 0·4	3	+ 0·02	+ 0·2	6	+ 0·01	+ 1·3
ι Aurigæ	4	49	57 2	12	− 0·02	− 0·2	6	+ 0·02	− 1·2	16	+ 0·05	+ 0·3
ε Leporis	5	0	112 32	7	+ 0·02	− 0·8	5	0·00	− 1·7	13	− 0·03	− 1·6
β Orionis (*Rigel*) ...	5	9	98 21	3	+ 0·03	− 0·2	3	0·00	− 1·7	4	− 0·01	− 2·5
β Tauri	5	19	61 30	6	0·00	− 0·3	4	− 0·06	− 0·3	8	− 0·05	0·0
δ Orionis	5	26	90 23	3	0·00	− 2·0	2	0·00	− 3·3	6	− 0·05	− 2·6
α Leporis	5	27	107 55	2	+ 0·04	+ 0·2	1	− 0·02	− 1·2	2	+ 0·08	− 1·5
ε Orionis	5	30	91 17	3	+ 0·02	+ 0·5	3	− 0·01	− 1·3	5	− 0·01	− 1·9
α Columbæ	5	35	124 8	...	.....	.....	2	− 0·13	+ 0·3	4	− 0·16	+ 0·4
α Orionis	5	49	82 37	4	+ 0·01	− 1·8	8	+ 0·02	− 2·2	4	− 0·05	− 2·1
ν Orionis	6	1	75 13	6	− 0·01	− 0·4	8	+ 0·05	− 1·7	6	+ 0·02	− 1·6
μ Geminorum ...	6	16	67 26	2	0·00	0·0	12	+ 0·01	− 0·6	10	+ 0·01	− 1·3
γ Geminorum ...	6	31	73 30	9	− 0·02	+ 0·5	11	+ 0·02	+ 0·3	4	+ 0·02	+ 0·5

Corrections to the Nautical Almanac Stars as given by the Madras Mean Positions.

Stars.	Approximate Place 1878.			1877.			1878.			1879.		
				Obs.	R. A.	P. D.	Obs.	R. A.	P. D.	Obs.	R. A.	P. D.
	h.	*m.*	° ′		*s*	″		*s*	″		*s*	″
51 Cephei (*Hev.*) ...	6	43	2 46	5	− 0·13	+ 0·1	2	− 0·24	− 2·0	3	− 0·73	+ 1·1
ϵ Canis Majoris ...	6	54	118 48	4	− 0·04	− 0·1	4	0·00	− 0·6	13	− 0·07	− 2·4
γ Canis Majoris ...	6	58	105 27	...	.....	.....	11	− 0·01	− 1·0	13	+ 0·01	− 0·8
α^2 Geminorum(*Castor*)	7	27	57 51	2	− 0·02	− 0·7	16	+ 0·02	+ 0·1	10	− 0·05	0·0
α Can. Min. (*Procyon*)	7	33	84 28	11	− 0·06	− 2·6	3	− 0·01	− 4·2	5	− 0·14	− 5·7
β Geminorum(*Pollux*)	7	38	61 41	7	0·00	+ 0·7	2	+ 0·02	+ 0·4	6	0·00	+ 0·1
6 Cancri	7	56	61 52	3	+ 0·02	− 0·9	10	+ 0·02	− 0·4	14	+ 0·05	− 0·9
15 Argûs (*Navis*) ...	8	2	113 57	7	+ 0·03	0·0	4	− 0·02	− 1·6	9	− 0·05	− 1·9
η Cancri	8	26	69 9	5	+ 0·04	− 0·9	10	+ 0·01	− 0·5	20	+ 0·09	− 1·0
ϵ Hydræ	8	40	83 8	4	− 0·02	+ 0·2	3	− 0·14	− 2·7	5	+ 0·02	− 4·0
83 Cancri	9	12	71 47	11	+ 0·03	+ 0·5	6	+ 0·08	+ 0·2	2	0·00	− 1·0
α Hydræ	9	22	98 8	10	+ 0·03	− 0·7	4	0·00	− 1·9	10	− 0·01	− 3·6
ϵ Leonis	9	39	65 40	7	− 0·03	+ 0·6	7	+ 0·01	− 1·4	14	+ 0·03	− 1·1
π Leonis	9	54	81 22	10	+ 0·01	− 0·6	17	− 0·01	− 2·7	15	− 0·05	− 2·7
α Leonis (*Regulus*) ...	10	2	77 26	7	− 0·03	− 0·4	8	0·00	− 1·0	4	− 0·04	− 1·4
γ^1 Leonis	10	13	69 33	6	− 0·01	− 1·7	1	− 0·02	− 2·5	11	+ 0·03	− 1·9
ρ Leonis	10	26	80 4	7	− 0·02	− 0·9	6	− 0·05	− 3·5	4	− 0·06	− 2·8
l Leonis	10	43	78 49	7	+ 0·03	− 0·5	18	+ 0·03	− 2·7	14	+ 0·03	− 1·7
χ Leonis	10	59	82 0	9	+ 0·02	− 0·3	14	− 0·01	− 3·2	8	+ 0·05	− 2·8
δ Leonis	11	8	68 48	7	− 0·01	− 0·8	6	− 0·02	− 2·2	3	+ 0·07	− 1·9
δ Crateris	11	13	104 7	5	− 0·03	− 1·3	20	− 0·05	− 1·1	6	− 0·05	− 1·4
υ Leonis	11	31	90 9	5	+ 0·05	− 0·2	16	+ 0·01	− 1·6	3	+ 0·03	− 1·5
β Leonis	11	43	74 45	4	+ 0·02	+ 0·1	6	+ 0·08	+ 0·8	6	− 0·07	+ 0·1
ϵ Corvi	12	4	111 56	6	− 0·08	− 0·9	8	− 0·04	− 1·2	5	− 0·01	+ 0·2
η Virginis	12	14	89 59	10	+ 0·01	− 0·8	4	+ 0·04	− 1·5	5	+ 0·01	− 0·5
β Corvi	12	28	112 43	8	+ 0·06	− 0·5	2	+ 0·21	− 2·7	12	+ 0·08	− 2·2
γ Virginis (*Mean*) ...	12	35	90 47	...	.. ...	.....	...	.....	.....	1	− 0·07	− 0·9
α Canum Venaticorum	12	50	51 1	4	− 0·03	− 1·6	2	− 0·08	− 0·5	...	.....	.....
θ Virginis	13	4	94 53	3	− 0·02	− 0·4	5	+ 0·04	− 1·9	1	+ 0·15	− 1·9
α Virginis (*Spica*) ...	13	19	100 31	4	0·00	− 0·7	4	− 0·04	− 0·5	4	+ 0·05	− 0·9
ζ Virginis ...	13	28	89 58	4	− 0·05	− 1·6	4	+ 0·05	− 1·7	11	− 0·01	− 1·8
η Bootis	13	49	70 59	5	− 0·03	+ 0·5	6	− 0·05	+ 0·1	5	+ 0·01	− 1·1
τ Virginis	13	55	87 52	6	− 0·07	− 0·9	3	− 0·01	− 2·6	10	0·00	− 2·4
α Bootis (*Arcturus*)...	14	10	70 11	5	+ 0·02	+ 1·7	7	+ 0·03	+ 1·8	5	0·00	+ 0·4
ρ Bootis	14	27	59 6	4	0·00	+ 0·3	9	− 0·02	− 0·4	14	+ 0·02	0·0

Corrections to the Nautical Almanac Stars as given by the Madras Mean Positions.

Stars.	Approximate Place 1878.			1877.			1878.			1879.		
				Obs.	R. A.	P. D.	Obs.	R. A.	P. D.	Obs.	R. A.	P. D.
	h.	*m.*	° ′		*s*	″		*s*	″		*s*	″
ϵ^2 Bootis	14	40	62 25	2	+0·05	− 0·1	4	+0·06	− 0·2	1	+0·10	− 0·2
α Libræ	14	44	105 32	3	+0·04	− 0·7	7	0·00	− 0·8	5	− 0·02	− 1·1
ψ Bootis	14	59	62 35	3	− 0·06	− 0·1	5	0·00	− 0·3	6	− 0·03	− 0·8
β Libræ	15	10	98 56	2	0·00	− 0·2	12	− 0·01	− 1·0	3	− 0·02	− 0·2
α Coronæ	15	30	62 52	7	− 0·01	− 0·5	9	+0·03	− 1·3	6	− 0·08	− 1·6
α Serpentis	15	38	83 11	10	+0·02	− 1·3	12	− 0·01	− 1·7	4	0·00	− 3·3
β^1 Scorpii	15	58	109 28	16	0·00	− 1·7	9	+0·02	− 2·7	1	+0·30	− 4·1
δ Ophiuchi	16	8	93 23	15	− 0·01	+ 0·3	15	− 0·01	+ 0·1	1	0·00	+ 0·1
α Scorpii (*Antares*) ...	16	22	116 10	11	0·00	− 1·1	10	+0·05	+ 0·1	2	− 0·05	− 0·6
ζ Herculis	16	37	58 11	11	0·00	+ 1·3	4	− 0·09	+ 0·9	3	− 0·05	+ 0·6
κ Ophiuchi	16	52	80 26	7	0·00	− 0·7	4	+0·06	− 0·8	4	0·00	− 0·2
ϵ Ursæ Minoris ...	16	59	7 46	4	+0·61	− 0·4	4	+0·44	− 0·4	7	+0·67	+ 4·5
α^1 Herculis	17	9	75 28	7	0·00	− 1·5	3	+0·02	− 3·6	9	− 0·02	− 2·1
θ Ophiuchi	17	15	114 53	2	+0·07	− 0·9	2	+0·04	+ 0·5	2	+0·02	0·0
α Ophiuchi	17	29	77 21	7	+0·01	− 0·1	4	+0·02	− 3·1	4	0·00	− 2·2
μ Herculis	17	42	62 12	8	− 0·03	− 1·1	7	0·00	− 2·4	10	− 0·08	− 1·4
μ Sagittarii	18	6	111 5	12	+0·03	− 0·8	3	− 0·06	− 1·9	14	+0·03	− 1·5
δ Ursæ Minoris ...	18	12	3 28	8	− 0·13	− 0·1	7	− 0·05	+ 1·2	4	− 0·37	+ 0·5
α Lyræ	18	33	51 20	12	− 0·02	− 0·4	3	− 0·04	− 3·8	4	− 0·09	− 0·4
β^1 Lyræ	18	46	56 47	11	− 0·02	− 0·2	9	− 0·01	− 1·3	13	− 0·01	− 0·4
ζ Aquilæ	19	0	76 19	5	+0·06	+ 0·3	6	+0·01	− 2·0	15	− 0·01	− 1·5
ω Aquilæ	19	12	78 37	7	− 0·01	− 0·8	5	0·00	− 3·3	7	+0·01	− 1·3
δ Aquilæ	19	19	87 8	6	+0·01	− 0·2	10	+0·01	− 2·0	8	+0·04	− 1·2
h^2 Sagittarii ...	19	29	115 9	3	+0·07	+ 0·8	6	+0·01	− 2·1	8	+0·03	− 1·1
γ Aquilæ	19	40	79 41	4	− 0·04	− 1·2	8	− 0·01	− 2·6	9	0·00	− 1·7
α Aquilæ (*Altair*) ...	19	45	81 27	4	− 0·07	− 1·2	2	+0·01	− 2·5	...	.....	.....
λ Ursæ Minoris ...	19	46	1 4	...	.....	.....	...	.....	.....	1	− 0·93	+ 0·9
β Aquilæ	19	49	83 54	3	− 0·02	+ 0·3	7	0·00	− 2·9	3	+0·07	− 3·5
α^2 Capricorni ...	20	11	102 55	8	+0·03	− 0·2	9	+0·05	− 1·7	5	+0·04	− 1·8
ρ Capricorni ...	20	22	108 13	7	+0·10	0·0	15	+0·07	− 0·6	8	+0·09	− 0·3
α Cygni	20	37	45 9	12	+0·02	+ 0·2	5	− 0·02	− 0·9	4	− 0·26	− 2·1
32 Vulpeculæ ...	20	49	62 24	9	0·00	− 0·2	10	− 0·08	− 1·4	10	− 0·06	− 2·1
ζ Cygni	21	8	60 16	16	0·00	− 0·2	8	− 0·01	− 1·0	7	− 0·02	− 2·5
β Aquarii	21	25	96 6	16	− 0·01	− 0·1	7	− 0·02	0·0	9	+0·14	− 1·1
ϵ Pegasi	21	38	80 41	2	− 0·04	− 1·8	3	− 0·04	− 0·2	5	− 0·02	− 1·7

Corrections to the Nautical Almanac Stars as given by the Madras Mean Positions.

Star.	Approximate Place 1878.			1877.			1878.			1879.		
				Obs.	R. A.	P. D.	Obs.	R. A.	P. D.	Obs.	R. A.	P. D.
	h.	*m.*	° ′		*s*	″		*s*	″		*s*	″
16 Pegasi	21	48	64 39	6	− 0·06	− 0·2	2	− 0·07	− 1·3	7	− 0·08	− 2·7
α Aquarii	22	0	90 55	8	− 0·02	− 0·4	5	+ 0·04	0·0	4	+ 0·07	− 1·4
θ Aquarii	22	10	98 23	13	− 0·01	− 1·6	4	+ 0·04	− 1·7	6	0·00	− 1·9
η Aquarii	22	29	90 45	15	+ 0·02	+ 0·2	9	+ 0·05	+ 0·3	4	+ 0·05	− 1·9
ζ Pegasi	22	35	79 48	9	− 0·03	− 0·8	10	− 0·01	− 0·6	6	+ 0·02	− 1·6
α Pis. Aus. (*Fomalhaut*)	22	51	120 16	1	+ 0·11	+ 0·8	2	− 0·06	+ 0·2	2	+ 0·10	− 0·5
α Pegasi (*Markab*) ...	22	59	75 27	11	0·00	+ 1·2	10	− 0·03	+ 0·9	7	− 0·03	+ 0·2
γ Piscium	23	11	87 23	1	− 0·01	− 1·2	6	+ 0·02	− 0·9	5	− 0·04	− 1·8
κ Piscium	23	21	89 25	2	+ 0·02	− 0·9	3	− 0·02	0·0	3	− 0·01	− 2·5
ι Piscium	23	34	85 2	15	− 0·01	− 0·6	4	− 0·04	− 1·1	4	+ 0·02	− 1·4
δ Sculptoris	23	43	118 48	8	+ 0·01	+ 1·0	1	− 0·01	0·0	6	+ 0·01	+ 0·6
ω Piscium	23	53	83 49	10	− 0·04	− 2·0	2	− 0·03	− 2·2	5	− 0·05	− 2·1

ERRATA.

Page.	No.	Subject.	For	Read
		In Madras Meridian Circle Observations for 1865, 66, *and* 67.		
66	85	Degrees of Mean P. D.	161	151
68	129	,, ,, ...	158	153
70	142	,, ,, ...	152	153
,,	143	Hours of Mean R. A.	8	3
		In Madras Meridian Circle Observations for 1871, 72, *and* 73.		
5, 38	60	Degrees of Mean P. D.	79	81
		In Madras Meridian Circle Observations for 1877, 78, *and* 79.		
5	53	Seconds of Mean R. A.	23·02, 22·92	22·68, 22·54
54	,,	,, ,, ...	22·97	22·61
40, 78	460	Name	...	delete 54
61	160	Sign of proper motion in P. D.	−	+
,,	173	,, ,, in R. A.	+	−
67	275	Name	26	27
73	365	Annual Precession in P. D.	1·658	1·669
77	427	Sign of proper motion in P. D.	−	+
86	9	Seconds of Mean R. A.	52·98	52·71
,,	,,	Minutes of Mean P. D.	50	40
,,	17	Minutes and seconds of Mean P. D.	56 8·9	57 9·9
87	35	Seconds of R. A.	9·97, 10·26	9·67, 9·76
88	38	Date	13	Dec. 13
89	55	Seconds of Mean R. A.	36·67	36·37
,,	61	Minutes and Seconds of Mean P. D.	11 55·9	13 36·5
93	124	Seconds of Mean R. A.	44·11	42·32
,,	128	,, ,, ...	36	37
94, 164	148	,, ,, ...	41·42	41·68
129, 190	596	Seconds of Mean R. A.	41·50	41·12
,,	,,	Degrees of Mean P. D.	8	6
,,	,,	Seconds of Mean P. D.	10·1	7·1
138, 196	730	,, ,, R. A.	36·10	35·93
141	774	Date	2	Sep. 2
141, 200	771	Seconds of Mean P. D.	31	21
151	914	Seconds of Mean R. A.	44·60, 44·78	44·39, 44·49
,,	915	,, ,, ...	37·12, 37·36	36·97, 37·13
157	20	Name	2	20
159	39	Sign of proper motion in R. A.	+	−
,,	46	,, ,, in P. D.	+	−
163	111	,, ,, in R. A.	+	−
,,	137	,, ,, in P. D.	−	+

Page.	No.	Subject.	For	Read
175	341	Sign of proper motion in R. A.	−	+
179	389	Annual Precession in R. A.	3·5381	3·5361
181	452	,, ,, ,, ...	3·1965	3·1973
,,	,,	Secular Variation ,, ...	0·4892	0·4929
185	504	Annual Precession ,, ...	3·8063	3·8057
191	,,	Annual Precession in R. A.	2·8700	4·5957
191	,,	Secular Variation in R. A.	0·3963	0·7034
,,	,,	,, in P. D.	0·288	0·465
,,	626	Sign of proper motion in P. D. ...	−	+
193	658	Annual Precession in R. A.	3·3660	3·3633
194	687	Seconds of Mean R. A.	12	13
197	718	Annual Precession in P. D.	3·515	3·512
,,	721	Sign of proper motion in P. D.	−	+
199	750	Annual Precession in R. A.	2·8121	3·8121
,,	752	,, in P. D.	6·867	6·862
,,	757	Secular Variation in P. D.	0·051	0·031
203	834	Sign of Annual Precession in R. A.	+	−
,,	,,	Annual Precession in P. D.	13·660	13·634
208	914	Seconds of Mean R. A.	44·69	44·44
,,	915	,, ,, ...	37·24	37·05
209	933	Secular Variation in R. A....	0·0398	0·0388
211	948	Sign of proper motion in P. D.	−	+
,,	949	,, ,, ...	−	+
214	11	Seconds of Mean P. D.	0·0	3·0
216	37	Date	...	delete Sep.
223 } 294 }	143	Seconds of Mean R. A.	27·68	27·96

SEPARATE RESULTS

OF

OBSERVATIONS

OF THE FIXED STARS

MADE WITH THE

MADRAS MERIDIAN CIRCLE

IN THE YEAR

1877

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
1	21 *Andromedæ α, Alpherat.*				
Nov. 23	...	0 2 1·98	3	61 35 19·5	M
24	...	2 2·01	...	35 20·3	M
2	11 *Cassiopeiæ β*				
Oct. 16	2·3	0 2 37·29	...	31 31 44·4	R
17	2·0	2 37·31	...	31 44·0	R
18	2·0	2 37·28	...	31 44·8	R
3	*ε Phœnicis.*				
Oct. 2	4·0	0 3 9·66	...	136 25 34·7	R
3	4·0	3 9·68	...	25 35·4	R
5	4·0	3 9·56	...	25 36·1	R
4	88 *Pegasi γ, Algenib.*				
Nov. 27	...	0 6 54·22	...	75 30 2·6	M
28	...	6 54·18	...	30 3·5	M
Dec. 10	...	6 54·04	...	30 1·3	R
13	...	6 54·21	...	30 1·8	R
5	8 *Ceti ι*				
Oct. 1	4·0	0 13 9·63	...	99 30 21·3	R
6	*κ Phœnicis.*				
Oct. 1	4·0	0 20 9·07	...	134 21 45·5	R
6	4·0	20 8·85	...	21 43·1	R
7	*a Phœnicis.*				
Oct. 10	2·0	0 20 11·88	...	132 58 27·4	R
13	2·0	20 12·04	...	58 28·9	R
8	12 *Ceti.*				
Nov. 23	...	0 23 45·61	...	94 38 13·7	M
29	...	23 45·46	...	38 13·9	M
Dec. 3	...	23 45·72	...	38 13·3	R
10	...	23 45·69	...	38 14·5	R
15	...	23 45·67	...	38 13·2	R
9	*β Tucanæ—1st.*				
Oct. 18	4·0	0 25 53·03	...	153 38 11·5	R
20	4·0	25 54·01	...	38 10·8	R
31	4·0	25 53·97	...	38 10·7	R
10	*β Tucanæ—2nd.*				
Nov. 3	4·0	0 25 54·74	...	153 38 38·0	R
6	4·0	25 54·99	...	38 35·0	R
11	31 *Andromedæ δ*				
Oct. 1	3·0	0 32 45·38	...	59 48 43·6	R
20	3·0	32 45·41	...	48 44·1	R
12	16 *Ceti β*				
Nov. 19	...	0 37 24·79	...	108 39 43·4	M
21	...	37 24·91	...	39 43·1	M
Dec. 10	...	37 24·99	...	39 43·1	R
15	...	37 24·89	...	39 44·0	R
13	24 *Cassiopeiæ—η 1st.*				
Nov. 3	4·0	0 41 40·80	...	32 50 14·4	R
14	24 *Cassiopeiæ—η 2nd.*				
Oct. 31	8·2	0 41 40·55	...	32 50 19·0	R
15	27 *Cassiopeiæ γ*				
Oct. 31	...	0 49 18·09	...	29 56 56·7	R
Nov. 6	...	49 17·97	...	56 59·9	R
16	2 *Ursæ Minoris.*				
Nov. 22	...	0 52 14·84	3	4 24 13·2	M
29	...	52 15·55	3	24 14·0	M
Dec. 14	...	52 14·87	3	24 13·3	R
	2 *Ursæ Minoris—s.p.*				
June 4	...	0 52 14·75	2	4 24 20·5	R

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
17		*R. P. L.* 14.			
Nov. 3	...	0 55 43·64	3	3 30 37·0	R
12	...	55 43·83	3	30 36·7	R
Dec. 10	...	55 43·71	3	30 37·4	R
		R. P. L. 14—*s.p.*			
Apl. 30	...	0 55 43·09	3	3 30 37·5	R
18		71 *Piscium* ϵ			
Nov. 26	...	0 56 33·68	...	82 46 20·7	M
27	...	56 33·61	...	46 20·6	M
Dec. 11	...	56 33·64	...	46 22·3	R
15	...	56 33·66	...	46 20·1	R
17	...	56 33·65	...	46 22·3	R
19		β *Phœnicis.*			
Oct. 31	3·5	1 0 35·44	...	137 22 39·2	R
20		υ *Phœnicis.*			
Nov. 19	5·8	1 2 10·42	...	132 8 43·8	M
20	5·7	2 10·64	...	8 43·4	M
28	5·9	2 10·62	...	8 43·5	M
Dec. 10	5·5	2 10·62	...	8 42·2	R
11	5·5	2 10·59	...	8 40·5	R
21		31 *Ceti* η			
Nov. 7	3·6	1 2 24·14	...	100 50 5·2	R
10	3·5	2 23·94	...	50 3·8	R
12	3·5	2 23·98	...	50 3·6	R
22		ι *Tucanæ.*			
Nov. 24	5·7	1 2 25·96	...	152 25 59·7	M
29	5·0	2 26·09	...	25 58·4	M
30	5·0	2 26·02	3	25 58·9	R
Dec. 12	5·0	2 26·01	...	25 59·8	R
13	5·0	2 25·97	...	25 59·0	R

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
23		43 *Androm.* β (*Mirach*).			
Nov. 21	2·7	1 2 50·85	...	55 1 57·4	M
22	2·3	2 50·93	...	1 58·3	M
23	2·4	2 50·88	...	1 55·6	M
24		33 *Cassiopeiæ* θ			
Nov. 26	4·7	1 3 37·17	...	35 30 17·5	M
27	4·4	3 37·06	...	30 18·2	M
Dec. 3	4·5	3 37·01	...	30 17·0	R
14	4·5	3 37·16	...	30 17·5	R
15	4·5	3 37·19	...	30 17·8	R
25		*Lalande* 2186.			
Oct. 31	8·9	1 7 16·09	...	81 40 38·7	R
Nov. 3	9·0	7 16·04	...	40 43·0	R
6	9·4	7 15·93	...	40 41·5	R
7	9·0	7 15·97	...	40 41·9	R
10	9·1	7 15·88	...	40 43·1	R
26		1 *Ursæ Minoris* α, *Polaris.*			
Dec. 21	...	1 13 40·95	3	1 20 48·1	M
27	...	13 40·92	3	20 46·7	M
		1 *Ursæ Minoris* α, *Polaris*—*s.p.*			
May 3	...	1 13 40·39	2	1 20 50·7	M
5	...	13 41·08	2	20 51·5	M
9	...	13 41·47	3	20 50·9	M
23	...	13 41·16	3	20 52·2	M
25	...	13 40·74	3	20 51·7	M
29	...	13 41·07	3	20 52·1	M
31	...	13 41·40	3	20 53·0	M
27		37 *Cassiopeiæ* δ			
Nov. 3	3·0	1 17 47·14	...	30 24 17·7	R
6	3·0	17 47·24	...	24 18·3	R
28		45 *Ceti* θ			
Nov. 24	...	1 17 52·36	...	98 49 5·6	M
29	...	17 52·53	...	49 5·9	M
Dec. 14	...	17 52·46	...	49 7·6	R
18	...	17 52·43	...	49 6·2	R

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
29		*R Sculptoris, Var.* 1.			
Nov. 19	7·0	1 21 18·10	4	123 10 54·7	M
20	6·9	21 18·26	...	10 54·4	M
21	7·0	21 18·18	...	10 55·5	M
Dec. 12	8·0	21 17·96	...	10 54·5	R
13	7·0	21 18·05	...	10 54·9	R
30		*γ Phœnicis.*			
Nov. 3	3·0	1 23 ~~1·17~~	...	133 56 56·8	R
7	3·0	23 ~~1·22~~	...	56 53·9	R
31		99 *Piscium η*			
Nov. 22	...	1 24 54·24	...	75 17 20·8	M
Dec. 13	...	24 54·18	...	17 19·7	R
14	...	24 54·25	..	17 19·5	R
18	...	24 54·09	...	17 20·4	R
32		*δ Phœnicis.*			
Nov. 6	4·0	1 26 7·50	...	139 42 44·9	R
10	4·0	26 7·47	...	42 46·4	R
33		106 *Piscium ν*			
Dec. 19	...	1 35 1·82	...	85 8 8·4	R
21	...	35 1·78	...	8 7·6	M
27	...	35 1·83	...	8 7·1	M
29	...	35 1·78	...	8 8·8	M
34		52 *Ceti τ*			
Nov. 3	3·5	1 38 20·98	...	106 35 7·7	R
35		55 *Ceti ζ*			
Nov. 6	3·0	1 45 23·61	...	100 56 35·3	R
12	3·0	45 23·45	...	56 35·8	R
36		45 *Cassiopeiæ ε*			
Oct. 31	...	1 45 33·82	...	26 56 10·2	R
Nov. 3	...	45 33·81	...	56 14·6	R
7	...	45 33·77	...	56 11·3	R
37		6 *Arietis β*			
Dec. 19	...	1 47 50·66	...	69 47 39·9	R
21	...	47 50·75	...	47 39·7	M
29	...	47 50·80	...	47 38·5	M
38		*χ Eridani.*			
Jan. 6	4·0	1 51 10·09	...	142 13 18·6	R
39		*a Hydri.*			
Nov. 3	3·0	1 54 53·64	...	152 10 9·9	R
7	3·0	54 53·79	...	10 9·1	R
40		57 *Andromedæ γ*—1*st.*			
Jan. 6	...	1 56 21·04	...	48 15 39·9	R
10	...	56 21·22	...	15 41·0	R
Oct. 31	...	56 21·19	...	15 39·5	R
~~Nov. 10~~	...	~~56 21·33~~	...	~~15 39·7~~	R
				40·1	
41		57 *Andromedæ γ*—2*nd.*			
Jan. 8	...	~~1 56 22·12~~	...	~~48 15 37·8~~	R
12	...	56 22·01	...	15 36·1	R
16	...	56 22·02	...	15 37·0	R
				36·6	
42		13 *Arietis a*			
Dec. 17	...	2 0 14·41	...	67 7 12·8	R
21	...	0 14·51	...	7 12·5	M
29	...	0 14·36	...	7 15·7	M
43		4 *Trianguli β*			
Nov. 24	...	2 2 13·63	...	55 35 44·9	M
26	...	2 13·62	...	35 43·8	M
27	...	2 13·62	...	35 44·9	M
Dec. 10	...	2 13·63	...	35 44·3	R
11	...	2 13·60	...	35 43·1	R
44		*μ Fornacis.*			
Nov. 12	5·0	2 7 29·74	...	121 18 5·4	R
23	5·5	7 29·59	...	18 6·1	M
29	5·5	7 29·61	...	18 5·5	M
Dec. 10	5·0	7 29·60	...	18 6·7	R
11	5·0	7 29·58	...	18 5·2	R

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
45		*8 Trianguli δ*			
Nov. 22	5·9	2 9 32·89	...	56 20 23·7	M
Dec. 18	5·5	9 32·77	4	20 25·2	R
29	5·7	9 32·78	...	20 25·0	M
46		*9 Trianguli γ*			
Nov. 19	5·7	2 10 0·26	...	56 43 22·0	M
21	5·5	10 0·34	...	43 22·2	M
Dec. 13	5·5	10 0·10	...	43 21·3	R
15	5·5	10 0·19	...	43 20·8	R
17	5·5	10 0·13	...	43 21·8	R
47		*π¹ Hydri.*			
Dec. 19	5·5	2 11 40·82	...	158 25 0·7	R
27	5·8	11 40·77	...	25 2·3	M
48		*φ Eridani.*			
Jan. 10	4·0	2 12 6·64	...	142 4 57·5	R
13	4·0	12 6·61	...	4 58·5	R
15	4·0	12 6·66	...	4 54·2	R
49		*π² Hydri.*			
Dec. 21	5·9	2 12 55·11	...	158 18 59·2	M
50		*S Persei, Var.* 4.			
Jan. 5	10·5	2 14 2·38	...	31 58 37·9	R
6	10·6	14 2·50	...	58 36·9	R
51		*Anon.*			
Jan. 12	8·9	2 14 27·34	...	31 43 42·9	R
52		*κ Fornacis.*			
Nov. 12	5·0	2 16 55·01	...	114 22 33·4	R
26	5·7	16 54·83	...	22 34·0	M
Dec. 3	5·5	16 55·41	...	22 33·9	R
10	5·5	16 54·92	...	22 34·3	R
11	5·5	16 54·92	...	22 32·8	R
53		*Taylor* 798.			
Nov. 27	5·4	2 17 23·02	...	133 45 46·6	M
Dec. 15	5·5	17 22·82	...	45 47·4	R
54		*24 Arietis ξ*			
Nov. 29	5·8	2 18 13·61	...	79 56 51·0	M
Dec. 17	5·5	18 13·56	...	56 51·1	R
18	5·5	18 13·56	...	56 50·4	R
19	5·5	18 13·52	...	56 49·5	R
27	5·7	18 13·70	...	56 50·8	M
55		*Radcliffe* 706.			
Nov. 28	4·3	2 18 57·26	...	23 9 8·0	M
Dec. 29	4·6	18 57·33	...	9 7·3	M
56		*δ Hydri.*			
Jan. 5	4·0	2 19 34·30	4	159 13 12·9	R
8	4·0	19 34·26	...	13 14·4	R
10	4·0	19 34·14	...	13 11·4	R
57		*73 Ceti ξ²*			
Jan. 1	...	2 21 37·09	...	82 5 30·9	R
58		*R. P. L.* 26.			
Dec. 3	...	2 25 53·17	3	3 29 24·6	R
59		*82 Ceti δ*			
Jan. 8	4·0	2 33 10·81	...	90 12 12·5	R
60		*ι Eridani.*			
Jan. 5	4·0	2 35 48·58	...	130 22 58·9	R
10	4·0	35 48·71	...	22 59·6	R
61		*86 Ceti γ—2nd.*			
Jan. 1	...	2 36 55·82	...	87 16 59·7	R
13	...	36 55·78	...	17 0·0	R
Dec. 18	...	36 55·68	...	17 1·3	R
27	...	36 55·68	...	17 3·5	M

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
62		89 *Ceti* π			
Jan. 6	4·0	2 38 16·10	...	104 22 48·4	R
8	4·0	38 16·16	...	22 51·6	R
12	4·0	38 16·04	...	22 50·2	R
63		41 *Arietis.*			
Jan. 5	...	2 42 44·55	...	63 14 51·0	R
6	...	42 44·52	...	14 50·9	R
10	...	42 44·62	...	14 51·8	R
64		3 *Eridani* γ			
Jan. 1	...	2 50 25·05	...	99 23 18·0	R
5	...	50 24·97	...	23 16·6	R
65		θ *Eridani*—1st.			
Jan. 6	3·5	2 53 35·77	...	130 47 54·6	R
10	3·5	53 35·62	...	47 56·8	R
66		θ *Eridani*—2nd.			
Jan. 8	5·5	2 53 36·81	...	130 47 56·2	R
13	5·5	53 36·65	...	47 53·0	R
67		92 *Ceti a, Menkar.*			
Jan. 16	...	2 55 51·00	...	86 23 36·2	R
Dec. 17	...	55 51·13	...	23 36·7	R
19	...	55 51·07	...	23 37·0	R
27	...	55 50·96	...	23 35·4	R
68		11 *Eridani* τ^3			
Jan. 12	4·0	2 56 58·16	...	114 6 27·9	R
15	4·0	56 57·98	...	6 28·1	R
69		*R. P. L.* 33.			
Jan. 13	...	3 3 20·69	3	5 31 46·6	R
Nov. 27	...	3 30·51	3	31 46·9	M
Dec. 19	...	3 28·88	3	31 47·3	R
June 1	...	3 3 30·37	3	5 31 46·5	R
70		57 *Arietis* δ			
Jan. 4	...	3 4 35·88	...	70 44 25·0	R
5	...	4 35·93	...	44 22·8	R
8	...	4 35·88	...	44 23·7	R
12	...	4 35·82	...	44 24·0	R
15	...	4 35·86	...	44 24·5	R
71		12 *Eridani.*			
Jan. 10	3·5	3 6 50·63	...	119 28 24·0	R
72		13 *Eridani* ζ			
Jan. 1	...	3 9 51·35	4	99 16 38·4	R
5	...	9 51·42	...	16 39·8	R
73		16 *Eridani* τ^4			
Jan. 1	3·5	3 14 2·49	...	112 12 25·9	R
4	3·4	14 2·52	...	12 26·6	R
6	...	14 2·53	...	12 23·6	R
8	3·5	14 2·61	...	12 26·1	R
74		18 *Eridani* ϵ			
Jan. 1	3·4	3 27 7·83	...	99 52 32·5	R
5	3·5	27 7·96	...	52 32·1	R
10	3·5	27 8·00	...	52 33·6	R
13	3·5	27 7·99	...	52 33·3	R
75		19 *Eridani* τ^5			
Jan. 4	4·0	3 28 21·30	...	112 2 47·6	R
8	4·0	28 21·42	...	2 48·9	R
12	4·0	28 21·47	...	2 46·9	R
15	4·0	28 21·25	...	2 46·5	R
76		39 *Persei* δ			
Jan. 1	3·0	3 34 10·20	...	42 36 27·5	R
4	3·0	34 10·19	...	36 28·4	R
5	3·0	34 10·24	...	36 25·8	R
6	3·0	34 10·14	...	36 27·5	R
Nov. 19	3·4	34 10·36	...	36 27·7	M

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
77		*23 Eridani δ*			
Jan. 8	3·5	3 37 21·44	...	100 10 53·3	R
12	3·5	37 21·23	...	10 51·0	R
15	3·5	37 21·34	...	10 52·3	R
16	3·5	37 21·26	...	10 51·8	R
78		*25 Tauri η, Alcyone.*			
Jan. 4	...	3 40 10·47	...	66 16 38·6	R
6	...	40 10·42	...	16 36·8	R
10	...	40 10·50	...	16 37·3	R
13	...	40 10·46	...	16 36·7	R
17	...	40 10·47	...	16 37·6	R
19	...	40 10·47	...	16 36·0	R
79		*26 Eridani π*			
Nov. 21	5·3	3 40 19·67	...	102 29 19·3	M
22	5·4	40 19·55	...	29 17·8	M
28	5·5	40 19·57	...	29 17·8	M
Dec. 19	5·0	40 19·59	...	29 18·6	R
27	5·4	40 19·70	...	29 20·7	M
80		*27 Eridani τ⁶*			
Nov. 23	4·4	3 41 33·39	...	113 36 52·5	M
27	4·7	41 33·19	...	36 52·2	M
29	4·6	41 33·32	...	36 51·1	M
Dec. 21	4·7	41 33·32	...	36 52·8	M
29	5·2	41 33·32	...	36 54·0	M
81		*υ² Eridani.*			
Jan. 1	4·0	3 44 50·80	...	126 34 23·8	R
8	4·0	44 50·89	4	34 25·8	R
12	4·0	44 51·03	...	34 26·3	R
82		*Lalande 7193.*			
Nov. 20	7·5	3 47 26·54	...	73 44 36·7	M
21	7·6	47 26·75	...	44 38·0	M
22	7·7	47 26·72	...	44 38·0	M
Dec. 19	7·0	47 26·59	...	44 38·1	R
21	7·4	47 26·51	...	44 39·1	M

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
83		*34 Eridani γ¹*			
Jan. 4	...	3 52 17·35	...	103 51 35·9	R
6	...	52 17·43	...	51 34·0	R
8	...	52 17·40	...	51 35·7	R
10	...	52 17·44	...	51 35·8	R
15	...	52 17·40	...	51 35·6	R
17	...	52 17·43	...	51 35·6	R
22	...	52 17·44	...	51 36·2	R
84		*R. P. L. 35.*			
Jan. 5	...	3 58 32·40	3	4 46 16·7	R
16	...	58 32·72	3	46 19·8	R
85		*T Tauri, Var. 4.*			
Jan. 22	11·0	4 4 34·57	3	68 30 36·0	R
23	11·0	4 34·57	2	30 36·0	R
86		*38 Eridani o¹*			
Jan. 1	...	4 5 51·59	...	97 9 38·5	R
5	...	5 51·61	...	9 33·4	R
10	...	5 51·57	...	9 35·0	R
12	...	5 51·63	...	9 34·2	R
15	...	5 51·63	...	9 35·3	R
87		*γ Doradus.*			
Jan. 4	4·0	4 12 48·06	...	141 47 52·8	R
5	4·0	12 47·96	...	47 50·4	R
16	4·0	12 48·07	...	47 51·0	R
18	4·0	12 48·08	...	47 52·6	R
88		*α Reticuli.*			
Jan. 1	3·5	4 12 50·56	...	152 46 57·7	R
8	3·5	12 50·76	...	46 57·8	R
13	3·5	12 50·57	...	46 56·6	R
15	3·5	12 50·53	...	46 56·8	R
Feb. 19	3·6	12 50·75	...	47 58·7	M
89		*41 Eridani υ⁴*			
Jan. 6	3·5	4 13 14·23	...	124 6 1·2	R
10	3·5	13 14·33	4	6 2·4	R
12	3·5	13 14·26	...	6 0·3	R
17	3·5	13 14·28	...	6 3·2	R

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
90		43 *Eridani* υ^5			
Jan. 4	4·0	4 19 24·77	...	124 18 14·3	R
5	4·0	19 24·78	...	18 12·0	R
10	4·0	19 24·86	5	18 14·0	R
15	4·0	19 24·71	...	18 13·2	R
91		74 *Tauri* ϵ			
Jan. 6	...	4 21 26·09	...	71 5 38·6	R
8	...	21 26·05	...	5 40·3	R
13	...	21 26·01	...	5 39·1	R
16	...	21 26·18	...	5 39·6	R
18	...	21 26·14	...	5 40·1	R
22	...	21 25·94	...	5 40·2	R
26	...	21 26·16	...	5 39·6	R
Feb. 2	...	21 26·14	...	5 39·8	M
3	...	21 26·15	...	5 39·5	M
10	...	21 26·04	...	5 39·6	M
92		87 *Tauri a, Aldebaran.*			
Jan. 5	...	4 28 51·76	...	73 44 22·2	R
12	...	28 51·81	...	44 22·6	R
Feb. 5	...	28 51·88	...	44 23·8	M
6	...	28 51·93	...	44 22·6	M
93		48 *Eridani* ν			
Jan. 18	4·0	4 30 10·45	...	93 36 22·0	R
23	4·0	30 10·38	...	36 22·8	R
25	4·0	30 10·56	...	36 20·6	R
27	4·0	30 10·56	...	36 20·1	R
Feb. 9	4·6	30 10·40	...	36 20·1	M
94		52 *Eridani* υ^7			
Jan. 19	3·5	4 30 46·26	...	120 48 54·6	R
24	3·5	30 46·31	...	48 55·5	R
26	3·5	30 46·12	...	48 54·7	R
29	3·5	30 46·22	...	48 53·8	R
Feb. 10	3·8	30 46·17	...	48 53·4	M
95		*a Doradus.*			
Jan. 1	3·0	4 31 20·17	...	145 17 58·1	R
4	3·0	31 20·13	...	17 58·6	R
22	3·0	31 20·26	...	18 0·8	R

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
96		53 *Eridani.*			
Jan. 30	4·0	4 32 32·63	...	104 32 44·5	R
31	4·0	32 32·72	...	32 43·6	R
Feb. 2	4·4	32 32·80	...	32 44·4	M
3	4·4	32 32·69	...	32 45·1	M
16	4·0	32 32·83	...	32 44·5	M
97		54 *Eridani.*			
Jan. 18	4·0	4 35 3·67	...	109 54 32·6	R
22	4·0	35 3·76	...	54 32·7	R
23	4·0	35 3·79	...	54 33·0	R
25	4·0	35 3·74	...	54 31·7	R
Feb. 12	4·5	35 3·52	...	54 30·1	M
98		3 *Aurigæ* ι			
Jan. 18	...	4 48 59·07	...	57 1 50·8	R
23	...	48 59·05	...	1 50·3	R
25	...	48 59·04	...	1 49·8	R
27	...	48 59·06	...	1 50·0	R
Feb. 5	...	48 59·15	...	1 50·7	M
6	...	48 59·04	...	1 50·0	M
7	...	48 59·02	...	1 51·4	M
9	...	48 59·15	...	1 51·2	M
10	...	48 59·08	...	1 50·9	M
12	...	48 58·93	...	1 51·5	M
14	...	48 58·91	...	1 50·4	M
16	...	48 59·07	...	1 50·5	M
99		2 *Leporis* ϵ			
Jan. 16	...	5 0 15·15	...	112 32 16·7	R
30	...	0 15·24	...	32 15·0	R
Feb 3	...	0 15·16	...	32 16·0	M
8	...	0 15·25	...	32 14·8	M
12	...	0 15·30	...	32 15·1	M
13	...	0 15·32	...	32 15·8	M
16	...	0 15·20	...	32 15·9	M
100		67 *Eridani* β			
Jan. 18	3·0	5 1 48·12	...	95 14 50·0	R
22	3·0	1 48·13	...	14 49·7	R
23	3·0	1 48·18	...	14 49·2	R
25	3·0	1 48·25	...	14 48·8	R
Feb. 9	3·6	1 48·14	...	14 49·3	M

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
101		69 *Eridani* λ			
Jan. 19	4·0	5 3 15·50	...	98 54 46·7	R
24	4·0	3 15·53	...	54 48·4	R
26	4·0	3 15·62	...	54 50·2	R
27	4·0	3 15·73	...	54 47·5	R
Feb. 10	4·6	3 15·59	...	54 47·8	M
102		*μ Doradûs, Var.* 1.			
Jan. 1	9·5	5 5 54·48	...	151 57 51·1	R
4	9·6	5 54·49	...	57 50·8	R
5	9·8	5 54·49	...	57 48·1	R
8	9·8	5 54·49	...	57 49·4	R
10	9·8	5 54·52	...	57 50·7	R
13	9·8	5 54·50	...	57 49·8	R
15	9·9	5 54·40	...	57 50·2	R
103		19 *Orionis* β, *Rigel.*			
Jan. 27	...	5 8 37·59	...	98 20 46·1	R
31	...	8 37·59	...	20 42·9	R
Feb. 14	...	8 37·68	...	20 42·1	M
104		*Anon.*			
Jan. 13	9·2	5 10 53·80	6	152 11 7·9	R
15	9·2	10 53·68	...	11 6·6	R
16	9·2	10 53·70	...	11 6·8	R
18	9·3	10 53·71	...	11 4·6	R
Feb. 13	9·2	10 53·78	...	11 6·8	M
105		20 *Orionis* τ			
Jan. 22	4·0	5 11 38·14	...	96 58 44·2	R
23	4·0	11 38·14	...	58 43·1	R
24	4·0	11 38·23	...	58 41·2	R
25	4·0	11 38·06	...	58 42·5	R
Feb. 9	4·3	11 38·07	...	58 43·1	M
106		112 *Tauri* β			
Jan. 17	...	5 18 31·04	...	61 29 56·7	R
19	...	18 31·08	...	29 54·2	R
23	...	18 31·12	...	29 55·4	R
24	...	18 31·11	...	29 54·3	R
29	...	18 31·07	...	29 55·2	R
Feb. 8	...	18 31·03	...	29 54·4	M

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires	Mean Polar Distance 1877. ° ′ ″	Observer.
107		24 *Orionis* γ			
Jan. 1	2·0	5 18 32·15	...	88 45 44·8	R
4	2·0	18 32·12	...	45 45·2	R
108		*R. P. L.* 40.			
Jan. 18	...	5 22 45·81	3	4 52 19·1	R
25	...	22 45·65	3	52 17·5	R
Feb. 2	...	22 46·86	3	52 18·2	M
5	...	22 46·04	3	52 18·1	M
7	...	22 46·13	3	52 18·6	M
10	...	22 46·60	3	52 16·5	M
16	...	22 46·58	3	52 16·9	M
Dec. 29	...	22 45·92	2	52 18·0	M
109		9 *Leporis* β			
Jan. 4	4·0	5 22 58·34	...	110 51 33·7	R
5	4·0	22 58·48	...	51 31·3	R
8	4·0	22 58·44	...	51 32·7	R
110		34 *Orionis* δ, *Var.* 1.			
Jan. 24	...	5 25 43·42	...	90 23 29·3	R
Feb. 9	...	25 43·35	...	23 29·8	M
13	...	25 43·40	...	23 28·9	M
111		ϵ *Columbæ.*			
Jan. 1	4·0	5 26 50·53	...	125 33 41·8	R
10	4·0	26 50·61	...	33 44·4	R
12	4·0	26 50·48	...	33 41·8	R
13	4·0	26 50·44	...	33 42·7	R
112		11 *Leporis* α			
Jan. 26	...	5 27 18·35	...	107 54 42·7	R
29	...	27 18·38	...	54 42·9	R
113		44 *Orionis* ι—1st.			
Jan. 5	3·5	5 29 24·68	4	95 59 29·9	R
15	3·5	29 24·86	...	59 32·1	R
16	3·5	29 24·80	...	59 32·0	R
17	3·5	29 24·92	...	59 33·3	R

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
114		46 *Orionis* ε.			
Jan. 27	...	5 29 58·29	...	91 16 56·6	R
30	...	29 58·32	...	16 57·0	R
31	...	29 58·32	...	16 56·2	R
115		*β Doradûs.*			
Jan. 4	4·0	5 32 33·12	...	152 34 16·7	R
18	4·0	32 33·35	...	34 17·5	R
23	4·0	32 33·34	...	34 14·8	R
25	4·0	32 33·28	...	34 14·4	R
Feb. 14	4·0	32 33·37	...	34 15·7	M
116		48 *Orionis* σ—1*st.*			
Jan. 12	4·0	5 32 34·18	...	92 40 23·4	R
13	4·0	32 34·21	...	40 22·7	R
19	4·0	32 34·34	...	40 22·7	R
22	4·0	32 34·31	...	40 22·8	R
117		50 *Orionis* ζ			
Jan. 1	2·0	5 34 33·07	...	92 0 33·8	R
10	2·0	34 33·04	...	0 34·9	R
15	2·0	34 32·90	...	0 35·5	R
17	2·0	34 33·04	...	0 33·7	R
Feb. 10	2·0	34 33·02	...	0 33·3	M
118		13 *Leporis* γ			
Jan. 4	4·0	5 39 19·84	...	112 29 25·2	R
5	4·0	39 19·90	...	29 23·3	R
10	4·0	39 20·09	...	29 25·1	R
16	4·0	39 20·03	...	29 22·6	R
Feb. 9	4·3	39 19·98	...	29 23·2	M
119		53 *Orionis* κ			
Jan. 1	2·8	5 41 55·19	...	99 42 51·6	R
8	3·0	41 55·29	...	42 54·4	R
15	3·0	41 55·28	...	42 53·9	R
17	3·0	41 55·32	...	42 53·8	R

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
120		*β Columbæ.*			
Jan. 5	3·0	5 46 37·13	6	125 48 56·8	R
8	3·0	46 37·44	...	48 58·2	R
10	3·0	46 37·35	...	48 56·6	R
121		58 *Orionis* α, *Var.* 1, *Betelgeux.*			
Jan. 19	...	5 48 30·76	...	82 37 2·3	R
25	...	48 30·80	...	37 2·7	R
Feb. 2	...	48 30·67	...	37 1·9	M
7	...	48 30·90	...	37 2·5	M
122		34 *Aurigæ* β			
Jan. 12	2·0	5 50 30·63	...	45 4 4·9	R
16	2·0	50 30·18	...	4 2·2	R
18	2·0	50 30·08	...	4 3·3	R
23	2·0	50 30·15	...	4 2·7	R
123		16 *Leporis* η			
Jan. 15	4·0	5 50 47·93	...	104 11 30·8	R
17	4·0	50 48·19	...	11 30·9	R
22	4·0	50 47·90	4	11 30·9	R
24	4·0	50 48·16	...	11 28·4	R
Feb. 9	4·4	50 48·04	...	11 30·7	M
124		γ *Columbæ.*			
Jan. 4	4·0	5 53 10·11	...	125 17 53·6	R
5	4·0	53 10·32	...	17 52·3	R
13	4·0	53 10·25	...	17 50·4	R
19	4·0	53 10·34	...	17 51·0	R
Feb. 12	4·4	53 10·34	...	17 50·2	M
125		*R. P. L.* 43.			
Jan. 8	...	5 57 46·65	3	3 14 14·2	R
27	...	57 48·16	3	14 15·8	R
Feb. 14	...	57 48·93	3	14 16·4	M
		R. P. L. 43—*s.p.*			
Aug. 27	...	5 57 49·33	3	3 14 12·7	R

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
126		*67 Orionis ν*			
Jan. 18	...	6 0 32·89	...	75 13 7·8	R
22	...	0 33·06	...	13 7·3	R
26	...	0 32·85	...	13 7·8	R
Feb. 2	...	0 32·99	...	13 6·3	M
3	...	0 32·92	...	13 6·0	M
15	...	0 32·94	...	13 6·9	M
127		*13 Geminorum μ*			
Jan. 30	...	6 15 31·11	...	67 25 31·8	R
Feb. 15	...	15 31·22	...	25 31·8	M
128		*1 Canis Majoris ζ*			
Jan. 13	2·5	6 15 35·42	...	120 0 36·8	R
17	2·5	15 35·27	...	0 36·8	R
24	2·5	15 35·63	...	0 37·0	R
26	2·5	15 35·39	...	0 37·1	R
Feb. 13	2·9	15 35·42	...	0 36·7	M
129		*2 Canis Majoris β*			
Jan. 16	2·5	6 17 16·70	...	107 53 45·1	R
19	2·5	17 16·80	...	53 44·9	R
25	2·5	17 16·74	...	53 44·6	R
29	2·5	17 16·82	...	53 47·5	R
Feb. 10	2·6	17 16·77	...	53 46·9	M
130		*3 Canis Majoris.*			
Jan. 15	4·0	6 17 36·89	...	123 22 33·1	R
18	4·0	17 36·85	...	22 30·9	R
22	4·0	17 36·84	...	22 29·8	R
23	4·0	17 36·83	...	22 30·4	R
Feb. 12	4·5	17 36·96	...	22 31·9	M
131		*24 Geminorum γ*			
Jan. 24	...	6 30 36·28	...	73 29 51·5	R
25	...	30 36·32	...	29 50·7	R
29	...	30 36·28	...	29 52·3	R
31	...	30 36·30	...	29 51·8	R
Feb. 6	...	30 36·25	...	29 52·2	M
8	...	30 36·35	...	29 51·2	M
15	...	30 36·29	...	29 52·4	M
17	...	30 36·35	...	29 53·0	M
27	...	30 36·34	...	29 53·1	M

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
132		*ν Argûs.*			
Jan. 17	3·0	6 33 59·72	...	133 5 21·5	R
18	3·0	33 59·74	...	5 22·0	R
19	3·0	33 59·77	...	5 20·9	R
22	3·0	33 59·70	...	5 24·5	R
Feb. 12	3·6	33 59·80	...	5 20·9	M
133		*Lalande* 12863.			
Mar. 16	...	6 35 22·71	4	83 32 20·2	R
17	...	35 22·81	...	32 19·9	R
20	7·0	35 22·87	...	32 21·3	R
134		*51 Cephei Hev.*			
Feb. 24	...	6 42 15·93	3	2 46 2·6	M
27	...	42 16·78	3	46 1·4	M
		51 Cephei Hev.—s.p.			
June 28	...	6 42 16·07	2	2 46 4·1	M
July 4	...	42 15·20	2	46 4·2	M
Sept. 8	...	42 16·06	3	46 6·0	M
135		*13 Canis Majoris κ*			
Jan. 17	4·0	6 45 14·51	...	122 22 5·3	R
19	4·0	45 14·67	...	22 3·2	R
23	4·0	45 14·65	...	22 4·1	R
26	4·0	45 14·62	...	22 4·9	R
Feb. 10	4·5	45 14·72	...	22 5·4	M
136		*τ Argûs.*			
Jan. 18	4·0	6 46 52·99	...	140 28 8·4	R
22	4·0	46 52·85	...	28 9·0	R
25	4·0	46 53·13	...	28 7·2	R
30	4·0	46 52·98	...	28 7·5	R
Feb. 12	4·0	46 53·11	...	28 8·3	M
137		*16 Canis Majoris o*[1]			
Jan. 24	4·0	6 49 1·78	...	114 1 53·6	R
27	4·0	49 1·59	...	1 55·0	R
29	4·0	49 1·67	...	1 53·7	R
31	4·0	49 1·71	...	1 53·2	R
Feb. 13	4·5	49 1·88	...	1 53·6	M

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
138	21 *Canis Majoris* ε				
Jan. 23	...	6 53 47·50	...	118 48 22·0	R
Feb. 5	...	53 47·39	...	48 20·7	R
14	...	53 47·58	...	48 21·7	M
Mar. 17	...	53 47·44	...	48 21·0	R
139	22 *Canis Majoris.*				
Jan. 18	3·5	6 56 49·00	...	117 45 39·0	R
24	3·5	56 49·09	...	45 36·2	R
29	3·5	56 49·24	...	45 35·1	R
30	3·5	56 49·19	...	45 36·6	R
Feb. 12	3·9	56 49·04	...	45 36·6	M
140	*Taylor* 2813.				
Jan. 19	8·4	6 57 20·26	...	94 5 15·3	R
22	8·4	57 20·23	..	5 16·6	R
25	8·5	57 20·43	...	5 16·3	R
26	8·5	57 20·36	...	5 16·7	R
Feb. 13	8·4	57 20·42	...	5 15·7	M
141	24 *Canis Majoris* o^2				
Jan. 27	...	6 57 53·17	...	113 39 16·8	R
31	...	57 53·17	...	39 18·4	R
Feb. 2	...	57 53·32	...	39 16·4	M
3	...	57 53·18	...	39 16·4	M
17	...	57 53·33	...	39 15·9	M
142	25 *Canis Majoris* δ				
Jan. 19	...	7 3 23·31	...	116 11 57·4	R
22	...	3 23·24	...	11 58·1	R
23	...	3 23·19	...	11 58·1	R
24	...	3 23·47	...	11 58·1	R
Feb. 14	...	3 23·38	...	11 57·5	M
143	*π Argûs.*				
Jan. 19	3·0	7 12 47·86	...	126 52 39·5	R
23	3·0	12 47·76	..	52 40·4	R
24	3·0	12 47·82	...	52 38·6	R
25	3·0	12 47·83	...	52 37·9	R
Feb. 9	3·5	12 47·70	...	52 40·3	M
144	31 *Canis Majoris* η				
Feb. 2	2·6	7 19 13·52	...	119 3 50·9	M
5	2·7	19 13·67	...	3 51·1	M
6	2·3	19 13·73	...	3 50·9	M
10	2·5	19 13·68	...	3 51·5	M
Mar. 15	2·0	19 13·67	...	3 51·0	R
145	3 *Canis Minoris* β				
Jan. 23	3·0	7 20 28·66	...	81 27 50·4	R
24	3·0	20 28·66	...	27 47·0	R
25	3·0	20 28·70	...	27 48·5	R
26	3·0	20 28·61	...	27 46·6	R
Feb. 13	3·4	20 28·86	...	27 48·1	M
146	σ *Argûs.*				
Jan. 23	4·0	7 25 19·62	...	133 3 11·9	R
24	4·0	25 19·71	...	3 13·1	R
25	4·0	25 19·69	...	3 12·2	R
26	4·0	25 19·61	...	3 13·3	R
Feb. 14	4·3	25 19·63	...	3 13·7	M
147	66 *Geminorum* a^2, *Castor.*				
Feb. 19	...	7 26 45·01	...	57 50 35·6	M
22	...	26 45·01	...	50 37·3	M
148	10 *Canis Minoris* α, *Procyon.*				
Feb. 7	...	7 32 51·72	...	84 27 39·6	M
13	...	32 51·67	...	27 40·4	M
16	...	32 51·81	...	27 38·0	M
17	...	32 51·74	...	27 39·5	M
19	...	32 51·74	...	27 39·0	M
20	...	32 51·76	...	27 39·7	M
22	...	32 51·70	...	27 39·0	M
23	...	32 51·60	...	27 38·5	M
Mar. 16	...	32 51·72	...	27 39·5	R
17	...	32 51·74	...	27 39·5	R
19	...	32 51·80	...	27 40·1	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
149	*S Geminorum, Var.* 3.				
Jan. 26	10·4	7 35 20·82	...	66 14 2·9	R
27	10·4	35 20·96	...	14 2·6	R
29	10·5	35 20·75	...	14 2·9	R
30	10·5	35 20·74	...	14 2·5	R
150	78 *Geminorum* β, *Pollux.*				
Feb. 9	...	7 37 47·20	...	16 40 43·9	M
12	...	37 47·31	...	40 44·5	M
24	...	37 47·23	...	40 43·1	M
26	..	37 47·14	...	40 42·5	M
27	...	37 47·32	...	40 43·0	M
Mar. 16	...	37 47·21	...	40 43·1	R
19	...	37 47·16	...	40 43·3	R
151	7 *Argûs* ξ				
Jan. 24	3·5	7 44 7·28	...	114 33 8·0	R
25	3·5	44 7·28	...	33 7·1	R
26	3·5	44 7·20	...	33 8·1	R
29	3·5	44 7·17	...	33 7·5	R
Feb. 15	3·9	44 7·22	...	33 7·8	M
152	*R. P. L.* 49.				
Jan. 31	...	7 47 13·81	3	5 35 35·7	R
Feb. 20	...	47 13·87	3	35 36·0	M
22	...	47 14·35	3	35 36·9	M
153	*Taylor* 3318.				
Jan. 24	4·0	7 49 41·17	...	137 46 59·5	R
25	4·0	49 41·21	...	46 59·4	R
26	4·0	49 41·13	...	47 1·3	R
27	4·0	49 41·12	...	47 0·3	R
Feb. 9	4·9	49 41·04	5	46 59·8	M
154	χ *Argûs.*				
Jan. 29	4·0	7 53 38 84	...	142 39 9·8	R
30	4·0	53 38 90	...	39 11·1	R
31	4·0	53 38 95	...	39 8·8	R
Feb. 2	4·3	53 39·00	...	39 10·4	M
16	4 1	53 39·09	...	39 10·6	M
155	6 *Caneri.*				
Mar. 15	...	7 55 57·67	...	61 51 44·8	R
16	...	55 57·66	...	51 44·2	R
20	...	55 57·76	..	51 44·9	R
156	ζ *Argûs.*				
Jan. 26	2·5	7 59 15·52	...	129 39 24·3	R
29	2·5	59 15·65	...	39 24·1	R
30	2·5	59 15·80	...	39 24·4	R
31	2·5	59 15·72	...	39 22·7	R
Feb. 14	2·7	59 15·69	...	39 27·0	M
157	15 *Argûs* ι				
Feb. 20	...	8 2 18·26	...	113 57 4·6	M
23	...	2 18 34	...	57 2 9	M
24	...	2 18 33	...	57 4 0	M
26	...	2 18 49	...	57 4·4	M
28	...	2 18·38	...	57 4·0	M
Mar. 17	...	2 18·43	...	57 2·5	R
19	...	2 18·42	...	57 2·2	R
158	γ *Argûs—2nd.*				
Jan. 26	2·0	8 5 44·36	...	136 58 30·6	R
29	2·0	5 44·42	...	58 29·8	R
30	2·0	5 44·42	...	58 31·2	R
31	2·0	5 44·50	...	58 29·4	R
Feb. 9	2·6	5 44·40	...	58 30·6	M
159	ε *Argûs.*				
Jan. 31	2·0	8 19 59·19	...	149 6 52·3	R
Feb. 2	2·3	19 59 37	...	6 51·4	M
5	2·6	19 59·27	...	6 52·1	M
6	2·4	19 59·19	...	6 53·1	M
9	2·4	19 59·36	...	6 53·3	M
160	33 *Cancri* η				
Feb. 10	...	8 25 35·64	...	69 8 31·2	M
17	...	25 35·63	...	8 32·6	M
27	...	25 35·53	...	8 31·2	M
Mar. 15	...	25 35·71	...	8 33·9	R
23	...	25 35·74	...	8 32·4	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
161		*Anon.*			
Mar. 26	9·8	8 36 28·02	...	81 30 27·3	R
27	9·9	36 28·10	...	30 27·6	R
28	9·9	36 28·24	...	30 28·5	R
162		*o Argûs.*			
Feb. 5	4·0	8 36 46·17	...	142 29 10·3	M
6	4·3	36 46·06	...	29 9·0	M
7	4·4	36 45·99	...	29 9·7	M
8	4·2	36 46·15	...	29 9·8	M
Mar. 15	4·0	36 46·11	...	29 10·2	R
163		*Anon.*			
Mar. 19	9·5	8 37 24·63	...	81 36 52·3	R
164		11 *Hydræ* ϵ			
Feb. 19	...	8 40 15·75	...	83 7 51·1	M
Mar. 21	...	40 15·61	...	7 54·3	R
23	...	40 15·61	...	7 52·2	R
Apl. 10	...	40 15·62	...	7 53·2	R
165		δ *Argûs.*			
Feb. 10	2·9	8 41 18·50	...	144 15 30·1	M
13	3·0	41 18·80	...	15 29·1	M
14	3·2	41 18·61	...	15 29·9	M
15	3·2	41 18·62	...	15 29·5	M
Mar. 16	3·0	41 18·57	...	15 29·9	R
166		*R. P. L.* 60.			
Mar. 22	...	8 49 22·31	3	5 19 48·7	R
28	...	49 20·84	3	19 48·2	R
		R. P. L. 60—*s.p.*			
Oct. 10	....	8 49 20·77	2	5 19 50·1	R
16	...	49 21·17	3	19 47·9	R
20	...	49 21·76	3	19 47·6	R
167		*W. B. E.* VIII. 1302.			
Apl. 13	8·5	8 51 27·03	...	98 56 43·9	R

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
168		*Taylor* 3930—1*st* (b^1 *Carinæ*).			
Feb. 6	5·5	8 53 57·68	...	148 45 17·9	M
7	5·0	53 57·73	...	45 20·2	M
8	4·9	53 57·74	...	45 19·0	M
12	4·7	53 57·86	...	45 20·7	M
Mar. 15	4·0	53 57·76	...	45 19·5	R
169		*Taylor* 3949—(b^2 *Carinæ*).			
Feb. 10	4·8	8 56 22·95	...	148 36 49·5	M
13	4·6	56 23·12	...	36 49·5	M
14	4·9	56 22·92	...	36 49·6	M
15	4·9	56 23·13	...	36 49·9	M
Mar. 20	4·0	56 23·03	...	36 48·7	R
170		λ *Argûs.*			
Feb. 5	3·4	9 3 28·41	...	132 56 13·1	M
6	3·3	3 28·36	...	56 12·9	M
7	3·6	3 28·49	...	56 14·0	M
8	3·4	3 28·38	...	56 12·9	M
9	3·3	3 28·41	...	56 13·7	M
171		*Taylor* 4028.			
Feb. 16	8·2	9 6 34·04	4	132 46 6·2	M
172		β *Argûs.*			
Feb. 7	1·5	9 11 50·72	...	159 12 48·0	M
8	1·5	11 50·61	...	12 40·9	M
9	1·4	11 50·80	...	12 42·3	M
10	1·4	11 50·63	...	12 42·2	M
Mar. 19	...	11 50·86	...	12 40·5	R
173		83 *Cancri.*			
Feb. 20	...	9 12 6·96	...	71 46 28·4	M
22	...	12 6·93	...	46 29·1	M
23	...	12 7·03	...	46 28·2	M
24	...	12 6·85	...	46 28·4	M
26	...	12 6·79	...	46 28·7	M
28	...	12 6·85	...	46 28·1	M
Mar. 15	...	12 6·71	...	46 29·3	R
20	...	12 6·89	...	46 29·1	R
22	...	12 6·80	...	46 27·9	R
28	...	12 6·88	...	46 28·7	R
Apl. 2	...	12 6·73	...	46 29·0	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′	Observer.
174		*κ Argûs.*			
Feb. 10	3·5	9 18 18·47	5	144 29 10·2	M
13	3·5	18 18·55	5	29 9·2	M
14	3·5	18 18·33	...	29 8·9	M
15	3·2	18 18·41	...	29 9·7	M
Mar. 15	3·0	18 18·40	...	29 10·2	R
175		30 *Hydræ a, Var.* 2.			
Feb. 28	...	9 21 32·49	...	98 7 34·5	M
Mar. 20	...	21 32·50	...	7 34·1	R
21	...	21 32·57	...	7 35·1	R
22	...	21 32·56	...	7 33·2	R
24	...	21 32·57	...	7 35·4	R
27	...	21 32·55	...	7 33·8	R
Apl. 2	...	21 32·65	...	7 35·6	R
4	...	21 32·57	...	7 35·7	R
19	...	21 32·49	...	7 35·4	R
May 23	...	21 32·63	...	7 34·9	M
176		*ψ Argûs.*			
Feb. 12	4·0	9 25 51·35	...	129 55 45·0	M
15	4·2	25 51·32	...	55 43·3	M
16	4·3	25 51·43	...	55 45·8	M
17	4·0	25 51·53	...	55 45·1	M
Mar. 15	4·0	25 51·34	...	55 44·5	R
177		*W. B. E. IX.* 708			
Apl. 7	8·7	9 33 15·71	...	86 14 57·1	R
11	8·8	33 15·75	...	14 56·2	R
12	8·8	33 15·72	...	14 54·9	R
14	8·8	33 15·83	...	14 55·3	R
18	8·7	33 15·84	...	14 56·7	R
178		*Anon.*			
Apl. 10	10·0	9 37 3·60	4	79 51 50·4	R
13	10·0	37 3·70	...	51 47·2	R
16	10·0	37 3·78	...	51 51·2	R
17	10·0	37 3·70	...	51 50·7	R
19	10·0	37 3·80	...	51 50·4	R
179		*Anon.*			
Apl. 11	10·0	9 37 48·12	4	79 46 16·7	R
12	10·0	37 47·93	...	46 15·7	R
14	10·0	37 47·86	...	46 16·6	R
18	10·0	37 47·78	...	46 19·2	R
20	10·0	37 47·76	...	46 16·7	R
180		17 *Leonis* ϵ			
Mar. 22	...	9 38 52·04	...	65 39 37·4	R
23	...	38 51·98	...	39 39·0	R
24	...	38 52·04	...	39 40·7	R
26	...	38 52·01	...	39 39·0	R
28	...	38 51·99	...	39 38·0	R
Apl 2	...	38 52·02	...	39 37·5	R
May 23	...	38 52·04	...	39 37·1	M
181		*Anon.*			
Apl. 17	8·2	9 41 11·56	...	79 21 19·5	R
19	8·2	41 11·60	...	21 20·7	R
20	8·2	41 11·46	...	21 20·3	R
21	8·3	41 11·51	...	21 19·4	R
23	8·3	41 11·34	...	21 19·7	R
182		*v Argûs.*			
Feb. 15	3·4	9 44 1·73	...	154 30 7·3	M
16	3·2	44 1·79	...	30 9·1	M
17	3·5	44 1·84	...	30 7·6	M
20	3·2	44 1·81	...	30 8·6	M
Mar. 16	3·0	44 1·60	...	30 5·1	R
183		24 *Leonis* μ			
Feb. 22	4·0	9 45 45·87	...	63 24 52·8	M
23	3·8	45 45·97	...	24 52·7	M
24	3·9	45 45·89	...	24 53·5	M
26	3·9	45 45·89	...	24 53·6	M
Mar. 19	3·0	45 45·90	...	24 52·4	R
184		*R. P. L.* 70.			
Mar. 24	...	9 48 37·89	3	5 29 25·0	R
Apl. 14	...	48 38·46	3	29 25·8	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
		R. P. L.* 70—*s.p.			
Oct. 4	...	9 48 37·63	3	5 29 28·5	R
13	...	48 37·38	3	29 27·3	R
185		***φ Argûs.***			
Feb. 17	4·5	9 52 32·68	...	143 58 58·1	M
19	4·5	52 32·78	...	58 58·0	M
20	4·5	52 32·86	...	58 58·8	M
22	4·3	52 32·88	...	58 58·8	M
Mar. 16	4·0	52 32·76	...	58 57·5	R
186		**29 *Leonis π***			
Mar. 21	...	9 53 42·71	...	81 21 58·9	R
26	...	53 42·80	...	21 59·2	R
27	...	53 42·73	...	21 58·8	R
Apl. 4	...	53 42·79	...	21 59·4	R
7	...	53 42·76	...	21 58 7	R
11	...	53 42·79	...	21 59·1	R
13	...	53 42·78	...	21 59·4	R
16	...	53 42·77	...	21 59·8	R
20	...	53 42·77	...	21 59·4	R
23	...	53 42·73	...	21 59·3	R
187		**32 *Leonis α, Regulus.***			
Mar. 24	...	10 1 49·17	...	77 25 56·9	R
27	...	1 49·21	...	25 55·1	R
Apl. 4	...	1 49·11	...	25 55·1	R
7	...	1 49·18	...	25 56·5	R
12	...	1 49·18	...	25 57·4	R
17	...	1 49·21	...	25 56·8	R
May 32	...	1 49·10	...	25 56·6	M
188		***q Velorum.***			
Feb. 19	4·7	10 9 34·61	...	131 30 48·4	M
20	4·7	9 34·75	...	30 48·2	M
22	4·5	9 34·55	...	30 48·3	M
23	4·6	9 34·45	...	30 47·2	M
Mar. 19	4·0	9 34·62	...	30 47·1	R

Number and Date.	Magnitude.	Mean Right Ascension. 1877. h. m. s.	No. of Wires.	Mean Polar Distance. 1877. ° ′ ″	Observer.
189		***ω Argûs.***			
Feb. 24	4·6	10 10 49·03	5	159 25 43·8	M
26	4·0	10 48·78	...	25 40·8	M
28	4·3	10 48·85	...	25 39·8	M
Mar. 20	4·0	10 48·80	...	25 41·0	R
23	4·0	10 48·77	...	25 41·2	R
190		***R. P. L.* 72.**			
Apl. 4	...	10 11 29·23	3	5 7 30·2	R
10	...	11 29·22	3	7 29·1	R
17	...	11 29·43	3	7 30·6	R
		R. P. L.* 72—*s p.			
Sep. 10	...	10 11 29·07	3	5 7 33·1	M
17	...	11 29·37	3	7 33·2	M
27	...	11 29·92	3	7 33·2	M
Oct. 1	...	11 29·93	3	7 30·6	R
6	...	11 29·19	3	7 33·0	R
Nov. 12	...	11 31·98	3	7 32·8	R
191		**41 *Leonis* γ^1**			
Mar. 26	...	10 13 11·32	...	69 32 11·6	R
Apl. 5	...	13 11·27	...	32 11·0	R
7	...	13 11·34	...	32 10·9	R
18	...	13 11·32	...	32 13·5	R
21	...	13 11·29	...	32 12·2	R
27	...	13 11·31	...	32 11·5	R
192		**34 *Ursæ Majoris μ***			
Feb. 27	3·7	10 14 59·63	...	47 52 56·5	M
Mar. 16	3·0	14 59·61	...	52 53·7	R
19	3·0	14 59·60	...	52 56·3	R
21	3·0	14 59·62	...	52 55·4	R
22	3·0	14 59·64	...	52 56·1	R
193		**42 *Hydræ μ***			
Feb. 22	4·3	10 20 8·43	...	106 12 32·6	M
23	4·3	20 8·52	...	12 31·1	M
24	4·5	20 8·37	...	12 32·8	M
26	4·6	20 8·41	...	12 32·9	M
Mar. 15	4·0	20 8·56	...	12 31·2	R

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
194		*47 Leonis ρ*			
Mar. 28	...	10 26 20·05	...	80 3 40·4	R
Apl. 5	...	26 20·01	...	3 39·0	R
11	...	26 19·99	...	3 39·1	R
13	...	26 20·07	...	3 40·5	R
16	...	26 20·01	...	3 40·3	R
19	...	26 19·97	...	3 41·8	R
21	...	26 20·02	...	3 40·1	R
195		*θ Argûs.*			
Mar. 24	3·0	10 38 34·02	...	153 45 2·9	R
26	3·0	38 34·06	...	45 1·8	R
27	3·0	38 34·05	...	45 1·6	R
28	3·0	38 34·03	...	45 1·6	R
Apl. 2	3·0	38 34·05	...	44 59·5	R
196		*μ Argûs.*			
Feb. 27	3·5	10 41 29·00	...	138 46 15·9	M
28	...	41 29·06	...	46 15·1	M
Mar. 15	3·0	41 28·91	...	46 13·4	R
16	3·0	41 28·94	...	46 13·6	R
20	3·0	41 29·07	...	46 12·4	R
197		*53 Leonis l.*			
Apl. 5	...	10 42 47·52	...	78 48 16·6	R
10	...	42 47·43	...	48 16·4	R
12	...	42 47·50	...	48 15·6	R
14	...	42 47·46	...	48 16·0	R
20	...	42 47·44	...	48 16·3	R
26	...	42 47·47	...	48 16·0	R
28	...	42 47·42	...	48 14·0	R
198		*ν Hydræ.*			
Mar. 19	4·0	10 43 33·49	...	105 33 0·2	R
23	4·0	43 33·38	...	32 59·0	R
27	4·0	43 33·44	...	32 56·5	R
Apl. 2	4·0	43 33·45	...	32 58·3	R
4	4·0	43 33·54	...	32 56·7	R
199		*Anon.*			
Mar. 21	10·5	10 43 50·76	...	81 48 21·2	R
22	10·5	43 50·75	...	48 21·3	R
24	10·5	43 50·71	...	48 22·4	R
26	10·5	43 50·76	...	48 22·2	R
28	10·5	43 50·81	...	48 19·9	R
200		*Taylor* 4915.			
Mar. 20	8·5	10 47 6·97	...	135 33 51·1	R
201		*48 Ursæ Majoris β*			
Mar. 15	...	10 54 24·37	...	32 57 32·0	R
19	...	54 24·34	...	57 31·5	R
20	...	54 24·40	...	57 32·4	R
21	...	54 24·17	...	57 30·2	R
22	...	54 24·11	...	57 31·2	R
202		*63 Leonis χ*			
Apl. 10	...	10 58 40·31	...	81 59 58·3	R
11	...	58 40·28	...	59 58·4	R
14	...	58 40·31	...	59 58·6	R
17	...	58 40·34	...	59 59·7	R
20	...	58 40·23	...	59 58·6	R
23	...	58 40·28	...	59 58·3	R
26	...	58 40·30	...	59 59·1	R
30	...	58 40·22	...	59 58·9	R
May 5	...	58 40·35	...	59 59·0	M
203		*11 Crateris β*			
Mar. 19	4·0	11 5 36·58	...	112 9 15·8	R
20	4·0	5 36·50	...	9 16·5	R
21	4·0	5 36·48	...	9 15·8	R
24	4·0	5 36·42	...	9 16·2	R
Apl. 2	4·0	5 36·62	...	9 14·2	R
204		*68 Leonis δ*			
Apl. 12	...	11 7 33·86	...	68 48 10·4	R
14	...	7 33·83	...	48 11·0	R
18	...	7 33·92	...	48 8·4	R
21	...	7 33·97	...	48 9·5	R
27	...	7 33·90	...	48 8·7	R
30	...	7 33·98	...	48 8·2	R
May 8	...	7 34·00	...	48 8·7	M

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
205		70 *Leonis* θ			
Mar. 22	3·0	11 7 46·80	...	73 53 54·1	R
23	3·0	7 46·79	...	53 53·6	R
26	3·0	7 47·03	...	53 54·7	R
28	3·0	7 47·04	...	53 55·8	R
Apl. 4	3·0	7 47·02	...	53 56·2	R
206		12 *Crateris* δ			
Apl. 13	...	11 13 11·47	...	104 6 46·2	R
17	...	13 11·44	...	6 46·1	R
18	...	13 11·54	...	6 46·9	R
23	...	13 11·52	...	6 45·9	R
26	...	13 11·49	...	6 46·9	R
207		*π Centauri.*			
Mar. 20	4·0	11 15 24·19	...	143 49 1·8	R
22	4·0	15 23·99	...	49 0·6	R
24	4·0	15 23·88	...	48 59·3	R
28	4·0	15 24·00	...	48 57·5	R
Apl. 12	4·0	15 23·99	...	48 57·9	R
208		15 *Crateris* γ			
Mar. 21	4·0	11 18 44·10	...	107 0 29·5	R
23	4·0	18 44·01	...	0 29·1	R
26	4·0	18 44·23	...	0 29·1	R
Apl. 4	4·0	18 44·05	...	0 29·9	R
5	4·0	18 44·03	...	0 30·4	R
209		19 *Hydræ* ξ			
Mar. 20	4·0	11 26 57·47	...	121 10 38·0	R
21	4·0	26 57·33	...	10 37·8	R
23	4·0	26 57·26	...	10 36·2	R
24	4·0	26 57·26	...	10 34·6	R
Apl. 2	4·0	26 57·35	...	10 38·3	R
210		21 *Crateris* θ			
Mar. 21	...	11 30 26·43	...	99 7 17·4	R
22	...	30 26·46	...	7 17·2	R
23	...	30 26·40	...	7 17·3	R
26	...	30 26·66	...	7 17·7	R
Apl. 4	...	30 26·51	...	7 18·6	R

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
211		91 *Leonis* υ			
Apl. 16	...	11 30 39·01	...	90 8 42·2	R
19	...	30 39·12	...	8 40·9	R
28	...	30 39·03	...	8 41·0	R
May 3	...	30 39·13	...	8 41·1	M
8	...	30 39·03	...	8 42·0	M
212		27 *Crateris* ζ			
Mar. 23	...	11 38 31·43	...	107 39 59·9	R
24	...	38 31·40	...	39 59·2	R
26	...	38 31·48	...	39 57·8	R
Apl. 2	...	38 31·36	...	39 58·5	R
5	...	38 31·38	...	39 58·6	R
213		*Anon.*			
May 26	8·4	11 38 45·97	...	149 43 8·1	M
214		*Anon.*			
May 9	8·6	11 38 50·97	...	148 40 12·9	M
24	9·0	38 50·97	...	40 13·8	M
25	8·9	38 51·19	...	40 12·8	M
28	8·9	38 51·17	...	40 11·7	M
215		94 *Leonis* β, *Deneb.*			
Apl. 27	...	11 42 47·10	...	74 44 25·6	R
28	...	42 47·03	...	44 26·5	R
30	...	42 47·08	...	44 24·7	R
May 4	...	42 47·11	...	44 25·8	M
216		28 *Hydræ* β			
Mar. 24	4·0	11 46 41·99	...	123 13 26·4	R
26	4·0	46 42·13	...	13 24·8	R
Apl. 2	4·0	46 42·03	...	13 24·3	R
4	4·0	46 41·96	...	13 23·9	R
5	4·0	46 41·94	...	13 26·2	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
217	X *Virginis, Var.* 10.				
Mar. 24	10·4	11 55 34·00	...	80 14 27·9	R
26	10·5	55 34·14	...	14 28·4	R
Apl. 2	10·6	55 34·09	...	14 28·9	R
4	10·5	55 34·12	...	14 27·8	R
5	10·5	55 34·17	3	14 28·8	R
7	10·6	55 34·16	...	14 30·2	R
10	10·6	55 34·10	...	14 30·8	R
11	10·6	55 33·93	...	14 31·5	R
12	10·6	55 33·95	...	14 31·2	R
13	10·6	55 33·97	4	14 31·9	R
218	*R. P. L.* 89.				
Apl. 20	...	11 58 32·73	3	3 43 50·1	R
27	...	58 33·19	3	43 49·7	R
	R. P. L. 89—*s.p.*				
Nov 29	...	11 58 34·20	3	3 43 52·2	M
Dec. 3	...	58 32·20	3	43 50·3	R
14	...	58 33·26	3	43 52·3	R
219	δ *Centauri.*				
Mar. 26	3·0	12 1 59·41	...	140 2 14·0	R
Apl. 2	3·0	1 59·32	...	2 13·4	R
4	3·0	1 59·34	...	2 12·8	R
11	3·0	1 59·59	...	2 10·5	R
14	3·0	1 59·30	...	2 13·1	R
220	1 *Corvi a*				
Apl. 5	4·5	12 2 4·04	...	114 2 32·4	R
10	4·5	2 4·02	...	2 32·0	R
12	4·5	2 3·97	...	2 31·7	R
16	4·5	2 3·91	...	2 31·6	R
May 2	4·6	2 4·17	...	2 33·1	M
221	*Taylor* 5574.				
May 9	7·5	12 3 22·85	...	141 5 59·0	M
24	7·5	3 22·80	...	5 58·3	M
June 4	7·5	3 22·75	...	5 56·7	R

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
222	2 *Corvi* ε				
May 4	...	12 3 48·05	...	111 56 7·3	M
8	...	3 47·98	...	56 7·5	M
12	...	3 47·94	...	56 6·9	M
23	...	3 48·00	...	56 7·3	M
25	...	3 47·91	...	56 7·3	M
26	...	3 48·05	...	56 6·8	M
223	ρ *Centauri.*				
Apl. 7	4·0	12 5 13·72	...	141 41 0·4	R
13	4·0	5 13·65	...	41 0·7	R
17	4·0	5 13·60	...	41 1·5	R
19	4·0	5 13·56	...	41 2·1	R
May 3	4·6	5 13·68	...	41 1·7	M
224	δ *Crucis.*				
Apl. 5	3·0	12 8 37·47	...	148 3 51·6	R
11	3·0	8 37·34	...	3 51·1	R
14	3·0	8 37·32	...	3 49·3	R
18	3·0	8 37·42	...	3 49·1	R
May 4	4·0	8 37·55	...	3 53·9	M
225	4 *Corvi* γ				
Apl. 10	3·0	12 9 28·94	...	106 51 31·0	R
12	3·0	9 28·94	...	51 30·5	R
13	3·0	9 28·97	...	51 30·7	R
16	3·0	9 28·88	...	51 29·8	R
May 5	3·4	9 28·92	...	51 31·6	M
226	15 *Virginis* η				
May 2	...	12 13 36·65	...	89 58 58·0	M
10	...	13 36·71	...	58 58·6	M
12	...	13 36·85	...	58 59·7	M
23	...	13 36·77	...	58 58·2	M
24	...	13 36·73	...	58 58·7	M
25	...	13 36·76	...	58 59·1	M
26	...	13 36·80	...	58 57·4	M
28	...	13 36·78	...	58 59·5	M
30	...	13 36·69	...	58 57·6	M
31	...	13 36·87	...	58 57·9	M

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
227		*ε Crucis.*			
Apl. 5	4·0	12 14 43·54	...	149 43 15·5	R
7	4·0	14 43·53	4	43 15·7	R
10	4·0	14 43·48	...	43 15·0	R
11	4·0	14 43·35	...	43 14·0	R
12	4·0	14 43·48	...	43 13·8	R
228		*7 Corvi δ*			
Apl. 10	3·0	12 23 30·04	...	105 49 48·5	R
12	3·0	23 30·05	...	49 48 6	R
14	3·0	23 30·01	...	49 49·2	R
16	3·0	23 29·95	...	49 47·8	R
May 2	3·4	23 29·99	...	49 48·6	M
229		*γ Crucis.*			
Apl. 17	2·0	12 24 20·67	...	146 25 27·7	R
19	2·0	24 20·69	...	25 26·9	R
21	2·0	24 20·92	...	25 26·1	R
26	2·0	24 20·88	...	25 26·6	R
May 3	2·3	24 20·82	...	25 28·1	M
230		*γ Muscæ.*			
Apl. 11	4·0	12 25 8·16	...	161 27 16·5	R
13	4·0	25 8·08	...	27 15·6	R
18	4·0	25 8·15	...	27 15·9	R
20	4·0	25 8·18	...	27 15·5	R
May 5	5·0	25 8·18	...	27 15·7	M
231		*9 Corvi β*			
May 10	...	12 27 55·66	...	112 42 58·8	M
12	...	27 55·61	...	42 57·6	M
23	...	27 55·62	...	42 59·1	M
24	...	27 55·60	...	42 57·1	M
25	...	27 55·72	...	42 58·1	M
28	...	27 55·47	...	42 59·3	M
29	...	27 55·68	...	42 59 3	M
30	...	27 55·65	...	42 59·0	M

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ″	Observer.
232		*α Muscæ.*			
Apl. 12	4·0	12 29 51·46	...	158 27 29·4	R
14	4·0	29 51·45	...	27 31·0	R
23	4·0	29 51·48	...	27 27·3	R
27	4·0	29 51·56	...	27 27·5	R
May 8	5·5	29 51·60	...	27 30·7	M
233		*Anon.*			
June 2	9·5	12 32 31·74	...	84 34 48·7	R
234		*γ Centauri.*			
Apl. 10	3·0	12 34 44·14	...	138 17 1·9	R
11	3·0	34 44·00	...	17 1·3	R
13	3·0	34 44·11	...	17 0·1	R
16	3·0	34 43·97	...	16 58·7	R
May 2	3·3	34 44·28	...	17 0·8	M
235		*β Muscæ.*			
Apl. 12	4·0	12 38 44·78	...	157 26 3·2	R
14	4·0	38 44·66	...	26 5·4	R
17	4·0	38 44·80	...	26 6·2	R
19	4·0	38 44·82	...	26 5·2	R
May 9	3·7	38 44·92	...	26 4·9	M
236		*β Crucis.*			
Apl. 11	2·0	12 40 32·29	...	149 0 58·3	R
13	2·0	40 32·28	...	0 57·5	R
16	2·0	40 31·97	...	0 56·4	R
18	2·0	40 32·00	...	0 56·1	R
May 8	2·0	40 31·98	...	0 56·9	M
237		*Anon.*			
June 2	10·9	12 44 10·46	3	80 44 50·6	R
4	10·9	44 10·61	2	44 50·7	R
5	10·8	44 10·30	5	44 50·7	R
238		*R. P. L. 98—sp.*			
Dec. 10	...	12 48 9·65	3	5 54 48·5	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
239		*R. P. L.* 99.			
May 3	...	12 48 14·15	3	5 55 3·9	M
June 5	...	48 14·72	3	55 4·4	M
9	...	48 15·08	3	55 5·9	M
23	...	48 14·97	3	55 4·5	M
25	...	48 14·36	3	55 3·5	M
29	...	48 14·64	3	55 5·4	M
31	...	48 14·99	3	55 3·7	M
		R. P. L. 99—*s.p.*			
Nov. 3	...	12 48 ~~16·75~~ 14·66	2	5 55 5·7	R
240		77 *Ursæ Majoris* ε (*Alioth*).			
Apl. 16	3·0	12 48 36·50	...	33 22 16·8	R
17	3·0	48 36·53	...	22 17·0	R
19	3·0	48 36·46	...	22 18·5	R
20	3·0	48 36·49	...	22 19·2	R
May 4	3·3	48 36·68	...	22 18·2	M
241		12 *Canum Venaticorum* α			
May 14	...	12 50 16·26	...	51 0 58·9	M
26	...	50 16·25	...	0 59·7	M
28	...	50 16·26	...	1 0·0	M
30	...	50 16·26	...	0 58·9	M
242		δ *Muscæ*.			
Apl. 20	3·0	12 53 ~~49·65~~ 49·84	...	160 53 9·7	R
23	4·0	53 ~~49·73~~ 49·95	...	53 7·8	R
27	4·0	53 ~~49·66~~ 49·99	...	53 8·5	R
28	4·0	53 ~~49·81~~ 49·87	...	53 7·7	R
May 24	5·0	53 49·56	...	53 11·1	M
243		17 *Virginis* ε (*Vindemiatrix*).			
Apl. 17	3·0	12 56 3·08	...	78 22 42·7	R
19	3·0	56 3·05	...	22 41·6	R
21	3·0	56 3·05	...	22 41·8	R
26	3·0	56 3·08	...	22 42·5	R
May 10	4·0	56 3·27	...	22 44·3	M

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
244		51 *Virginis* θ			
May 14	...	13 3 34·85	...	94 52 52·8	M
June 1	...	3 ~~34·89~~ 34·91	...	52 55·4	R
4	...	3 ~~34·94~~ 34·93	...	52 55·3	R
245		46 *Hydræ* γ			
Apl. 20	4·0	13 12 ~~14·23~~ 14·27	...	112 31 18·9	R
23	4·0	12 ~~14·16~~ 14·19	...	31 18·8	R
27	4·0	12 ~~14·22~~ 14·29	...	31 18·7	R
30	4·0	12 14·00 14·01	...	31 18·0	R
May 2	4·4	3 12 14·03	...	31 18·7	R
246		ι *Centauri*.			
Apl. 21	3·0	13 13 ~~40·46~~ 41·02	...	126 3 45·5	R
26	3·0	13 40·93	...	3 43·9	R
28	3·0	13 ~~40·87~~ 41·02	...	3 43·3	R
May 4	3·5	13 41·14	...	3 46·4	M
10	4·0	13 41·10	...	3 46·3	M
247		67 *Virginis* α, *Spica*.			
May 2	...	13 18 ~~42·79~~ 42·82	...	100 31 6·1	M
14	...	18 42·90	...	31 6·0	M
24	...	18 42·80	...	31 6·7	M
June 4	...	18 42·78	...	31 8·0	R
248		*R. P. L.* 103.			
Apl. 30	...	13 19 ~~42·15~~ 38·36	3	4 36 8·9	R
		R. P. L. 103—*s.p.*			
Oct. 31	...	13 19 ~~39·74~~ 38·13	3	4 36 11·9	R
Dec. 19	...	19 40·97	3	36 9·4	R
249		79 *Virginis* ζ			
May 3	...	13 28 25·56	...	89 57 58·2	M
5	...	28 25·48	...	57 57·4	M
31	...	28 25·49	...	57 56·1	M
June 4	...	28 ~~25·61~~ 25·60	...	57 56·6	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
250		*ε Centauri.*			
Apl. 26	3·0	13 32 5·70	...	142 50 23·5	R
27	3·0	32 5·79	...	50 23·0	R
28	3·0	32 5·58	...	50 23·7	R
30	3·0	32 5·53	...	50 22·4	R
May 4	3·4	32 5·60	...	50 23·4	M
251		*ν Centauri.*			
May 2	3·8	13 42 7·77	...	131 4 24·7	M
5	3·9	42 8·07	...	4 25·3	M
8	3·8	42 7·87	...	4 24·8	M
28	3·9	42 8·06	...	4 23·9	M
June 2	3·5	42 8·05	...	4 24·8	R
252		*μ Centauri.*			
Apl. 28	3·5	13 42 12·54	...	131 51 36·7	R
May 4	3·8	42 12·79	...	51 36·3	M
10	3·6	42 12·75	...	51 37·8	M
12	4·0	42 12·64	...	51 37·1	M
23	3·8	42 12·76	...	51 36·2	M
253		*ζ Centauri.*			
May 3	3·4	13 47 52·51	...	136 40 56·2	M
24	3·0	47 52·42	...	40 54·2	M
25	3·8	47 52·60	...	40 56·3	M
June 1	3·0	47 52·52	...	40 54·0	R
4	3·0	47 52·62	4	40 52·5	R
254		8 *Bootis η*			
May 9	...	13 48 49·74	...	70 59 6·8	M
June 2	...	48 49·68	...	59 5·5	R
5	...	48 49·71	...	59 6·1	R
7	...	48 49·54	...	59 5·7	R
14	...	48 49·74	...	59 8·4	R
255		*φ Centauri.*			
Apl. 30	4·5	13 50 47·84	...	131 29 55·8	R
May 4	4·9	50 47·95	...	29 55·8	M
14	...	50 48·01	...	29 56·8	M
30	4·4	50 47·94	...	29 55·1	M
31	5·0	50 48·07	...	29 56·1	M

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
256		*Stone* 7666.			
May 12	8·5	13 51 25·75	...	123 47 45·6	M
257		93 *Virginis τ*			
May 10	...	13 55 23·18	...	87 51 34·1	M
29	...	55 23·19	...	51 33·2	M
June 1	...	55 23·21	...	51 33·7	R
5	...	55 23·16	...	51 33·8	R
6	...	55 23·13	...	51 34·5	R
14	...	55 23·18	...	51 35·4	R
258		5 *Centauri θ*			
May 2	...	13 59 26·86	...	125 45 50·2	M
3	...	59 26·97	...	45 51·9	M
4	...	59 26·81	...	45 51·5	M
26	...	59 26·90	...	45 46·5	M
June 2	...	59 26·88	...	45 50·3	R
259		*R. P. L.* 108.			
June 4	...	14 2 15·24	3	3 39 10·1	R
260		16 *Bootis α, Arcturus.*			
May 2	...	14 10 3·22	...	70 10 34·6	M
3	...	10 3·01	...	10 35·8	M
9	...	10 3·20	...	10 36·1	M
29	...	10 3·06	...	10 35·5	M
June 9	...	10 3·11	...	10 36·7	R
261		*W. B. E.* XIV. 192.			
May 31	7·9	14 12 34·24	...	103 50 20·4	M
June 1	7·8	12 34·09	...	50 19·9	R
2	7·8	12 34·03	...	50 19·4	R
262		25 *Bootis ρ*			
May 5	...	14 26 31·78	...	59 5 16·2	M
9	...	26 31·62	...	5 16·6	M
June 2	...	26 31·80	...	5 15·8	R
9	...	26 31·83	...	5 16·7	R

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
263 *R Camelopardi, Var.* 1—*s.p.*					
Jan. 5	9·8	14 27 0·53	3	5 36 43·9	R
6	9·9	27	7	36 44·1	R
8	10·0	27	3	36 40·9	R
10	10·0	27 0·06	3	36 40·9	R
13	10·0	26 59·12	7	36 43·9	R
15	10·0	27	4	36 42·8	R
16	10·3	26 58·45	7	36 40·1	R
264 *η Centauri.*					
May 2	3·5	14 27 41·95	...	131 36 58·9	M
3	3·3	27 42·07	...	36 1·1	M
8	3·4	27 42·21	...	36 59·7	M
28	3·5	27 42·17	...	36 58·6	M
June 5	3·0	27 42·08	...	36 58·8	R
265 *a Circini.*					
May 4	4·4	14 32 35·26	...	154 26 17·5	M
5	4·3	32 35·23	...	26 17·8	M
10	4·4	32 35·35	...	26 16·4	M
June 1	4·0	32 35·15	...	26 19·7	R
2	4·0	32 35·20	...	26 18·4	R
266 36 *Bootis* ϵ, *Mirac.*					
June 5	...	14 39 37·01	...	62 24 23·1	R
7	...	39 36·91	...	24 22·2	R
267 9 *Libræ* a^2					
June 6	...	14 44 4·48	...	105 31 44·5	R
15	...	44 4·66	...	31 46·2	R
18	...	44 4·61	...	31 45·4	R
268 *β Lupi.*					
May 12	4·0	14 50 28·87	...	132 38 11·1	M
24	3·0	50 28·95	...	38 10·3	M
June 1	3·0	50 28·91	...	38 7·4	R
4	3·0	50 29·00	...	38 8·7	R
6	3·0	50 28·87	...	38 5·9	R
269 *κ Centauri.*					
May 31	3·4	14 51 9·98	...	131 36 32·3	M
June 2	3·0	51 9·94	...	36 32·4	R
5	3·0	51 9·94	...	36 32·3	R
7	3·0	51 9·89	...	36 31·4	R
9	3·0	51 9·93	...	36 31·1	R
270 42 *Bootis* β					
May 24	3·2	14 57 18·74	...	49 7 21·5	M
25	3·4	57 18·71	...	7 22·1	M
26	3·6	57 18·64	...	7 20·8	M
June 2	3·0	57 18·76	...	7 21·4	R
4	3·0	57 18·93	...	7 21·8	R
271 43 *Bootis* ψ					
June 9	...	14 59 10·46	...	62 34 17·6	R
16	...	59 10·49	...	34 20·0	R
20	...	59 10·53	...	34 17·7	R
272 *ζ Lupi.*					
May 12	...	15 3 27·49	...	141 37 45·2	M
28	...	3 27·69	...	37 46·0	M
31	...	3 27·69	...	37 45·5	M
June 2	...	3 27·61	...	37 45·1	R
4	...	3 27·44	...	37 44·6	R
273 *R. P. L.* 111—*s.p.*					
Jan. 16	...	15 4 14·85	3	5 34 24·9	R
Dec. 21	...	4 15·12	3	34 24·7	M
274 *γ Trianguli Australis.*					
May 29	3·4	15 7 26·77	...	158 13 22·9	M
30	3·8	7 26·72	...	13 23·5	M
June 5	3·0	7 26·65	...	13 21·5	R
6	3·0	7 26·61	...	13 22·0	R
7	3·0	7 26·80	...	13 22·3	R
275 27 *Libræ* β					
May 31	...	15 10 23·30	...	98 55 40·5	M
June 21	...	10 23·33	...	55 39·1	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
276		*U Coronæ Var.* 4.			
May 3	8·8	15 13 10 57	...	57 54 8·9	M
4	8·7	13 10·60	...	54 8·6	M
5	8·6	13 10·72	...	54 8·3	M
8	8·6	13 10·77	...	54 9·2	M
9	8·5	13 10·87	...	54 8·9	M
10	8·7	13 10·68	...	54 8·7	M
24	9·0	13 10·60	...	54 8·3	M
25	8·6	13 10·48	...	54 8·4	M
28	8·3	13 10·87	...	54 7·1	M
June 2	8·5	13 10·77	...	54 8·5	R
277		*δ Lupi.*			
May 23	4·7	15 13 18·05	...	130 12 6·9	M
June 6	4·0	13 18·12	...	12 7·2	R
7	4·0	13 17·88	...	12 8·3	R
9	4·0	13 17·89	...	12 8·1	R
15	4·0	13 17·90	...	12 8·0	R
278		*ε Lupi.*			
June 4	4·3	15 14 19·78	...	134 14 39·7	R
16	4·5	14 19·74	...	14 43·4	R
18	4·5	14 19·70	...	14 42·5	R
27	4·8	14 19·91	...	14 41·9	M
July 3	4·6	14 19·71	...	14 42·5	M
279		*S. Libræ, Var.* 5.			
July 9	9·0	15 14 20·27	...	109 56 34·9	M
10	9·0	14 20·35	...	56 36·6	M
11	9·4	14 20·42	...	56 34·8	M
280		*R. P. L.* 114—*s.p.*			
Nov. 27	...	15 17 34·07	2	2 17 49·0	M
281		13 *Ursæ Minoris* γ			
May 30	3·9	15 20 56·32	...	17 43 40·2	M
June 1	3·5	20 56·59	...	43 40·7	R
5	3·5	20 56·40	...	43 40·3	R
7	3·5	20 56·27	...	43 39·9	R
9	3·5	20 56·35	...	43 31·3	R

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
282		12 *Draconis* ι			
June 2	3·0	15 22 12·16	...	30 36 7·8	R
6	3·0	22 12·10	...	36 8·9	R
15	3·0	22 11·92	...	36 11·5	R
18	3·0	22 11·96	...	36 11·0	R
July 3	3·5	22 12·03	...	36 8·1	M
283		*γ Lupi.*			
May 12	3·4	15 26 56·81	...	130 45 5·8	M
23	3·4	26 56·87	...	45 5·1	M
June 16	3·0	26 56·76	...	45 5·6	R
20	3·0	26 56·76	...	45 5·4	R
27	...	26 56·94	...	45 4·5	M
284		37 *Libræ.*			
May 25	...	15 27 27·41	...	99 38 26·8	M
29	...	27 27·42	...	38 27·3	M
June 4	...	27 27·63	...	38 27·2	R
9	...	27 27·89	...	38 28·7	R
18	...	27 27·59	...	38 29·4	R
285		13 *Serpentis* δ—*2nd.*			
May 31	...	15 28 55·64	...	79 2 51·6	M
June 2	...	28 55·65	...	2 53·1	R
7	...	28 55·83	...	2 52·6	R
28	...	28 55·49	...	2 53·3	M
July 4	...	28 55·51	...	2 51·4	M
286		5 *Coronæ Borealis* α, *Alpheta.*			
May 4	...	15 29 28·83	...	62 52 11·6	M
June 15	...	29 28·72	...	52 13·8	R
July 7	...	29 28·76	...	52 11·3	M
10	...	29 28·90	...	52 13·0	M
11	...	29 28·89	...	52 11·9	M
16	...	29 28·89	...	52 12·7	M
18	...	29 28·89	...	52 12·1	M
287		39 *Libræ.*			
May 30	4·2	15 29 33·42	...	117 43 31·6	M
June 1	4·0	29 33·61	...	43 32·7	R
5	4·0	29 33·68	...	43 33·1	R
6	4·0	29 33·54	...	43 33·2	R
July 5	4·0	29 33·39	...	43 32·9	M

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288 24 *Serpentis a*

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
June 1	...	15 38 12·67	...	83 11 8·8	R
2	...	38 12·59	...	11 9·9	R
6	...	38 12·77	...	11 8·9	R
18	...	38 12·60	...	11 9·2	R
20	...	38 12·74	...	11 9·6	R
29	...	38 12·55	...	11 8·6	M
July 9	...	38 12·64	...	11 7·9	M
10	...	38 12·59	...	11 9·6	M
11	...	38 12·54	...	11 8·3	M
16	...	38 12·53	...	11 9·4	M

289 28 *Serpentis β*

May 28	3·7	15 40 30·59	...	74 11 30·7	M
29	3·7	40 30·60	...	11 31·9	M
June 4	3·5	40 30·78	...	11 30·5	R
7	3·5	40 30·62	...	11 30·6	R
14	3·5	40 30·60	...	11 33·2	R

290 5 *Lupi χ*

May 30	4·5	15 43 8·69	...	123 15 2·4	M
June 5	4·0	43 8·61	...	15 5·0	R
9	4·0	43 8·68	...	15 5·2	R
16	4·0	43 8·74	...	15 2·9	R
25	4·0	43 8·54	...	15 1·9	M

291 32 *Serpentis μ*

May 25	3·8	15 43 11·98	...	93 3 7·0	M
June 6	3·5	43 12·26	...	3 7·6	R
15	3·5	43 12 09	...	3 9·4	R
18	3·5	43 12·04	...	3 8·7	R
20	3·5	43 12·03	...	3 8·9	R

292 *β Trianguli Australis.*

May 31	3·5	15 44 19·20	...	153 2 56·0	M
July 3	3·0	44 19·03	...	2 55·1	M
4	3·5	44 19·07	...	2 55·6	M
5	3·1	44 19·09	...	2 56·8	M
7	3·5	44 19·26	...	2 56·7	M

293 37 *Serpentis ε*

June 7	3·0	15 44 41·06	...	85 9 0·6	R
July 9	3·5	44 40·96	...	8 59·1	M
10	3·6	44 41·05	...	9 0·8	M
11	3·7	44 41·18	...	8 59·7	M
14	3·0	44 41·01	...	9 1·0	M

294 45 *Libræ λ*

June 2	4·0	15 46 12·02	...	109 47 50·8	R
4	4·0	46 12·16	...	47 50·4	R
23	4·6	46 11·83	...	47 50·9	M
July 16	4·5	46 11·83	...	47 50·7	M
18	4·0	46 11·80	...	47 49·5	M

295 *R. P. L.* 115—*s.p.*

Jan. 5	...	15 46 23·97	3	4 46 19·3	R
13	...	46 25·88	3	46 19·9	R
18	...	46 24·95	3	46 18·9	R

296 5 *Scorpii ρ*

June 1	4·0	15 49 17·52	...	118 51 12·1	R
16	4·0	49 17·51	...	51 11·9	R
20	4·0	49 17·43	...	51 11·9	R
July 6	4·0	49 17·43	...	51 9·7	M
10	4·2	49 17·55	...	51 9·9	M

297 41 *Serpentis γ*

May 28	4·0	15 50 46·38	...	73 56 9·2	M
29	3·9	50 46·31	...	56 10·1	M
June 5	3·0	50 46·35	...	56 10·3	R
6	3·0	50 46·21	...	56 9·3	R
9	3·0	50 46·19	...	56 11·5	R

298 6 *Scorpii π*

June 4	3·5	15 51 24·70	...	115 45 29·0	R
7	3·5	51 24·51	...	45 28·6	R
14	3·5	51 24·54	...	45 28·9	R
July 4	3·6	51 24·45	...	45 28·8	M
9	3·4	51 24·55	...	45 28·0	M

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
299		8 *Scorpii* β^1			
June 7	...	15 58 17·05	...	109 28 1·2	R
15	...	58 17·19	...	28 1·7	R
16	...	58 17·14	...	27 59·8	R
22	...	58 17·18	...	28 0·4	R
23	...	58 17·25	...	27 59·1	M
25	...	58 17·23	...	27 59·3	M
27	...	58 17·12	...	28 0·2	M
28	...	58 17·11	...	28 1·1	M
29	...	58 17·25	...	27 59·3	M
July 3	...	58 17·24	...	27 59·7	M
4	...	58 17·10	...	28 0·6	M
5	...	58 17·19	...	28 1·1	M
6	...	58 17·13	...	28 0·6	M
7	...	58 17·24	...	28 0·8	M
11	...	58 17·19	...	28 0·1	M
14	...	58 17·25	...	27 59·7	M
300		13 *Draconis* θ			
May 26	...	15 59 35·28	...	31 6 17·9	M
29	...	59 35·22	...	6 19·2	M
June 2	...	59 35·44	...	6 19·1	R
4	...	59 35·30	...	6 19·6	R
5	...	59 35·30	...	6 20·2	R
301		*R. P. L.* 116.			
June 1	...	16 2 3·28	3	4 20 54·3	R
		R. P. L. 116—*s.p.*			
Jan. 8	...	16 2 1·20	3	4 20 51·1	R
Nov. 22	...	2 2·24	3	20 53·4	M
Dec. 27	...	2 2·58	3	20 51·7	M
29	...	2 0·27	3	20 50·2	M
302		1 *Ophiuchi* δ			
June 14	...	16 7 54·02	...	93 22 35·4	R
16	...	7 54·07	...	22 35·0	R
20	...	7 53·87	...	22 35·4	R
22	...	7 54·05	...	22 33·9	R
25	...	7 53·98	...	22 32·5	M
27	...	7 53·95	...	22 33·8	M
June 28	...	16 7 54·06	...	93 22 35·1	M
29	...	7 53·96	...	22 32·7	M
July 5	...	7 53·94	...	22 33·7	M
6	...	7 54·05	...	22 33·4	M
7	...	7 54·01	...	22 33·9	M
9	...	7 53·92	...	22 32·5	M
10	...	7 53·95	...	22 35·0	M
14	...	7 53·78	..	22 32·9	M
16	...	7 54·01	...	22 33·8	M
303		2 *Ophiuchi* ϵ			
May 28	3·9	16 11 48·69	...	94 23 23·8	M
29	3·2	11 48·73	...	23 23·4	M
30	3·6	11 48·59	...	23 22·4	M
June 2	3·0	11 48·96	...	23 23·0	R
4	3·0	11 48·97	...	23 23·0	R
304		20 *Herculis* γ			
May 25	3·7	16 16 29·76	...	70 33 23·9	M
June 4	3·5	16 29·95	...	33 24·1	R
5	3·5	16 29·90	...	33 26·8	R
6	3·5	16 29·82	...	33 27·8	R
7	3·5	16 29·67	...	33 27·4	R
305		21 *Scorpii a, Antares.*			
June 21	...	16 21 52·09	...	116 9 24·6	R
23	...	21 52·04	...	9 25·2	M
27	...	21 52·15	...	9 24·7	M
28	...	21 52·05	...	9 25·0	M
July 14	...	21 52·19	...	9 23·5	M
17	...	21 52·01	...	9 25·1	M
18	...	21 51·99	...	9 24·8	M
19	...	21 52·06	...	9 24·9	M
30	...	21 52·09	...	9 24·8	M
31	...	21 51·98	...	9 24·5	M
Aug. 3	...	21 51·97	...	9 24·8	M
306		*a Normæ.*			
May 30	4·4	16 23 20·74	...	124 26 2·3	M
June 16	4·0	23 20·75	...	26 4·6	R
20	4·0	23 20·75	...	26 4·7	R
29	4·0	23 20·83	...	26 3·5	M
July 2	4·0	23 20·68	...	26 2·6	M

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
307		*27 Herculis β*			
May 31	2·8	16 24 56·08	...	68 14 28·9	M
June 18	2·5	24 55·95	...	14 29·6	R
July 3	3·0	24 56·11	...	14 29·4	M
4	3·3	24 55·91	...	14 28·0	M
5	3·0	24 56·05	...	14 28·4	M
308		*S Ophiuchi, Var.* 3.			
June 1	10·9	16 27 10·56	5	106 54 3·4	R
2	10·8	27 10·58	...	54 3·8	R
4	10·8	27 10·44	...	54 1·7	R
5	10·8	27 10·36	...	54 1·8	R
6	10·9	27 10·47	3	54 1·7	R
7	10·9	27 10·35	3	54 0·5	R
9	10·9	27 10·45	1	54 1·6	R
14	10·9	27 10·61	3	54 1·0	R
15	10·9	27 10·45	3	54 1·3	R
309		*40 Herculis ζ*			
June 21	...	16 36 38·97	...	58 10 24·6	R
22	...	36 38·96	...	10 24·1	R
23	...	36 38·97	...	10 23·5	M
30	...	36 38·98	...	10 24·3	M
July 17	...	36 39·04	...	10 26·6	M
19	...	36 39·10	...	10 25·0	M
20	...	36 39·02	...	10 26·1	M
30	...	36 39·04	...	10 24·8	M
31	...	36 39·04	...	10 24·8	M
Aug. 3	...	36 39·08	...	10 23·9	R
7	...	36 39·00	...	10 24·2	R
310		*44 Herculis η*			
June 15	3·0	16 38 40·70	...	50 50 34·5	R
18	3·0	38 40·66	...	50 34·2	R
July 2	3·3	38 40·65	...	50 33·1	M
3	3·5	38 40·81	...	50 33·0	M
4	3·0	38 40·79	...	50 33·7	M
311		*η Arcæ.*			
June 16	4·5	16 39 10·36	...	148 49 10·4	R
20	4·5	39 10·42	...	49 9·5	R
July 9	4·8	39 10·48	...	49 8·7	M
10	4·3	39 10·63	...	49 9·0	M
11	5·0	39 10·51	...	49 7·7	M
312		*26 Scorpii ε*			
July 5	3·0	16 42 12·08	...	124 4 4·1	M
14	3·6	42 11·97	...	4 3·5	M
Aug. 7	3·0	42 11·80	...	4 4·4	R
10	3·5	42 11·96	...	4 2·3	M
17	3·0	42 11·95	...	4 4·9	R
313		*μ^1 Scorpii.*			
July 16	3·5	16 43 32·49	...	127 50 3·0	M
19	3·5	43 32·38	...	50 2·6	M
314		*μ^2 Scorpii.*			
June 18	4·0	16 44 0·32	...	127 48 21·7	R
22	4·0	44 0·32	...	48 19·8	R
25	4·3	44 0·48	...	48 19·4	M
July 17	4·5	44 0·47	...	48 19·9	M
20	4·3	44 0·05	...	48 20·3	M
315		*ζ^1 Scorpii.*			
June 16	4·5	16 45 19·13	...	132 9 18·0	R
20	4·5	45 19·18	...	9 17·5	R
July 21	4·7	45 19·19	...	9 16·7	M
30	5·0	45 19·13	...	9 17·5	M
Aug. 8	4·5	45 19·17	...	9 16·5	R
316		*ζ^2 Scorpii.*			
June 23	4·0	16 45 55·91	...	132 8 52·4	M
29	3·5	45 55·75	...	8 52·7	M
30	3·2	45 55·83	...	8 53·4	M
July 31	4·0	45 55·67	...	8 52·1	M
Aug. 21	3·0	45 55·81	...	8 53·2	R
317		*ζ Arcæ.*			
June 15	3·5	16 48 26·91	...	145 47 38·0	R
28	4·0	48 26·90	...	47 35·2	M
July 7	3·7	48 26·84	...	47 34·5	M
10	3·5	48 27·02	...	47 35·4	M
11	4·0	48 26·95	...	47 36·5	M

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
318		ϵ^1 *Arcæ.*			
June 20	4·0	16 49 47·02	...	142 58 7·9	R
22	4·0	49 46·99	...	58 6·8	R
July 5	4·0	49 47·16	...	58 4·7	M
16	4·5	49 47·29	...	58 5·6	M
19	4·4	49 47·00	...	58 6·3	M
319		27 *Ophiuchi* κ			
June 18	...	16 51 50·65	...	80 25 55·6	R
July 3	...	51 50·71	...	25 55·5	M
13	...	51 50·75	...	25 55·3	M
17	...	51 50·74	...	25 55·7	M
20	...	51 50·71	...	25 55·8	M
Aug. 3	...	51 50·78	...	25 54·7	R
7	...	51 50·75	...	25 54·6	R
320		58 *Herculis* ϵ			
June 15	...	16 55 34·87	...	58 53 29·4	R
16	...	55 34·77	...	53 29·2	R
20	...	55 34·79	...	53 28·7	R
25	...	55 34·97	...	53 27·4	M
July 4	...	55 34·94	...	53 28·7	M
321		22 *Ursæ Minoris* ϵ—*s.p.*			
Feb. 2	...	16 58 38·87	3	7 45 47·3	M
5	...	58 38·06	3	45 45·3	M
7	...	58 38·30	3	45 47·6	M
14	...	58 39·03	3	45 49·4	M
322		η *Scorpii.*			
June 18	3·5	17 3 20·68	...	133 4 27·8	R
20	3·5	3 20·69	...	4 27·1	R
23	3·8	3 20·85	...	4 27·2	M
July 2	3·8	3 20·72	...	4 24·9	M
9	3·7	3 20·71	...	4 26·1	M
323		U *Ophiuchi, Var.* 5.			
June 1	9·3	17 3 40·91	...	106 11 54·5	R
2	9·3	3 40·90	...	11 54·0	R
4	9·4	3 40·84	...	11 53·7	R
June 5	9·4	17 3 40·76	...	106 11 54·1	R
6	9·5	3 40·64	...	11 52·3	R
7	9·5	3 40·73	...	11 50·7	R
9	9·6	3 40·68	3	11 50·6	R
14	9·6	3 40·60	4	11 50·5	R
15	9·6	3 40·82	...	11 51·7	R
16	9·7	3 40·66	...	11 51·0	R
324		22 *Draconis* ζ			
June 15	3·0	17 8 25·95	...	24 8 1·3	R
20	3·0	8 26·11	...	8 3·1	R
28	3·5	8 26·15	...	8 0·7	M
July 11	3·9	8 26·17	...	7 59·8	M
14	3·4	8 26·21	...	8 0·4	M
325		64 *Herculis* a^1, *Var.* 1.			
June 25	...	17 9 2·31	...	75 28 1·7	M
30	...	9 2·41	...	28 4·3	M
July 13	...	9 2·20	...	28 5·3	M
18	...	9 2·37	...	28 5·0	M
Aug. 4	...	9 2·39	...	28 4·9	R
10	...	9 2·44	...	28 2·5	M
20	...	9 2·38	...	28 2·9	R
326		ζ *Apodis.*			
June 22	4·0	17 9 9·15	...	157 38 21·5	R
July 10	5·0	9 9·22	...	38 18·3	M
Aug. 8	4·0	9 9·37	...	38 19·4	R
16	...	9 9·38	...	38 18·4	R
17	4·0	9 9·34	...	38 18·0	R
327		67 *Herculis* π			
June 16	3·5	17 10 45·71	...	53 3 3·5	R
July 19	4·0	10 45·87	...	3 3·3	M
20	4·0	10 45·85	...	3 3·0	M
21	4·0	10 45·89	...	3 2·6	M
30	4·0	10 45·89	...	3 5·0	M
328		68 *Herculis u, Var.* 7.			
May 30	6·0	17 12 47·15	...	56 45 57·4	M
June 1	5·7	12 47·33	...	46 5·8	R
4	5·8	12 47·21	...	46 3·7	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
June 5	5·6	17 12 47·33	...	56 ~~46 4·9~~	R
6	5·6	12 47·24	...	~~46 3·3~~	R
7	5·6	12 47·04	...	~~46 2·8~~	R
9	5·8	12 47·12	...	~~46 3·8~~	R
14	5·8	12 47·24	...	~~46 1·5~~	R
18	5·8	12 47·15	...	~~46 3·2~~	R
21	6·0	12 47·24	...	~~46 2·0~~	R
329		40 *Ophiuchi* ξ			
June 20	4·5	17 13 37·95	...	100 58 44·3	R
27	4·9	13 38·09	..	58 42·0	M
July 17	5·0	13 37·91	...	58 42·4	M
31	5·0	13 38·03	...	58 42·5	M
Aug. 7	4·5	13 38·06	...	58 42·4	R
330		42 *Ophiuchi* θ			
July 2	...	17 14 27·45	...	114 52 27·0	M
Aug. 17	...	14 27·41	...	52 27·5	R
331		γ *Arcæ.*			
June 29	3·2	17 15 2·55	...	146 15 31·8	M
Aug. 21	3·0	15 2·39	...	15 33·3	R
22	3·0	15 2·46	...	15 32·6	R
332		β *Arcæ.*			
Aug. 20	3·0	17 15 4·46	...	145 24 36·7	R
333		δ *Arcæ.*			
June 18	4·0	17 19 59·78	...	150 34 40·5	R
21	4·0	19 59·91	...	34 37·8	R
July 5	4·0	20 0·00	...	34 41·6	M
19	4·0	19 59·85	...	34 40·1	M
21	4·2	19 59·75	...	34 37·4	M
334		α *Arcæ.*			
June 16	3·0	17 22 19·99	...	139 46 34·1	R
20	3·0	22 19·96	...	46 35·1	R
22	3·0	22 19·93	...	46 33·9	R
23	3·6	22 19·93	...	46 33·5	M
July 3	3·2	22 19·93	...	46 32·6	M

Number and Date.	Magnitude.	Mean Right Ascension. 1877. h. m. s.	No. of Wires.	Mean Polar Distance. 1877. ° ′ ″	Observer.
335		34 *Scorpii* υ			
June 25	...	17 22 24·01	...	127 11 43·2	M
28	...	22 23·85	...	11 43·4	M
30	...	22 23·98	...	11 43·5	M
July 4	...	22 23·90	...	11 43·3	M
6	...	22 24·08	...	11 43·3	M
336		35 *Scorpii* λ			
June 29	...	17 25 15·21	...	127 0 42·1	M
July 13	...	25 15·41	..	0 42·8	M
20	...	25 15·22	...	0 42·8	M
30	...	25 15·33	...	0 42·6	M
31	...	25 15·21	...	0 43·0	M
337		θ *Scorpii.*			
June 16	3·0	17 28 28·70	...	132 55 3·7	R
18	3·0	28 28·66	...	55 2·2	R
20	3·0	28 28·71	...	55 2·1	R
July 2	3·0	28 28·80	...	54 59·6	M
18	3·6	28 28·90	...	55 0·4	M
338		55 *Ophiuchi* α			
Aug. 4	...	17 29 13·55	...	77 20 56·1	R
7	...	29 13·46	...	20 54·6	R
8	...	29 13·48	...	20 56·1	R
10	...	29 13·46	...	20 56·3	M
14	...	29 13·42	...	20 56·7	R
17	...	29 13·38	...	20 54·6	R
21	...	29 13·51	...	20 56·4	R
339		η *Pavonis.*			
June 15	4·5	17 33 39·51	...	154 39 44·0	R
18	4·5	33 39·57	...	39 42·8	R
21	4·5	33 39·63	...	39 40·3	R
July 5	4·7	33 39·51	...	39 43·9	M
10	4·8	33 39·63	...	39 40·8	M
340		*Taylor* 8199.			
June 20	9·5	17 36 41·05	...	65 21 50·8	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
341		*69 Ophiuchi β*			
June 16	3·0	17 37 28·96	...	85 22 45·8	R
23	3·4	37 23·81	...	22 44·4	M
25	3·5	37 28·64	...	22 44·3	M
July 3	3·4	37 23·70	...	22 44·5	M
4	3·5	37 28·63	...	22 44·7	M
342		*ι¹ Scorpii.*			
June 29	3·6	17 38 58·78	...	130 4 35·9	M
30	3·8	38 58·77	...	4 37·1	M
July 9	3·4	38 59·05	...	4 34·8	M
11	3·6	38 59·04	...	4 36·2	M
18	3·9	38 58·86	...	4 35·1	M
343		*3 Sagittarii, Var.* 7.			
June 1	4·4	17 39 49·20	...	117 46 53·0	R
4	4·5	39 49·24	...	46 53·6	R
15	4·7	39 49·02	...	46 55·0	R
18	4·9	39 48·98	...	46 54·4	R
21	4·6	39 48·99	...	46 53·7	R
27	...	39 49·19	...	46 54·8	M
July 30	5·0	39 49·17	...	46 54·9	M
Aug. 7	4·5	39 48·99	...	46 54·3	R
8	4·5	39 48·96	...	46 54·6	R
16	...	39 49·04	...	46 54·9	R
344		*Taylor* 8229.			
June 16	4·0	17 41 29·12	...	127 0 7·1	R
20	4·0	41 29·04	...	0 6·1	R
July 31	4·0	41 28·96	...	0 5·6	M
Aug. 14	4·0	41 28·90	...	0 5·6	R
17	4·0	41 28·85	...	0 5·8	R
345		*86 Herculis μ*			
July 2	...	17 41 38·60	...	62 12 21·5	M
6	...	41 38·67	...	12 20·9	M
19	...	41 38·62	...	12 22·5	M
20	...	41 38·72	...	12 21·1	M
21	...	41 38·72	...	12 19·7	M
Aug. 4	...	41 38·62	...	12 21·8	R
9	...	41 38·69	...	12 22·8	R
22	...	41 38·74	...	12 21·7	R

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
346		*Lacaille* 7494.			
Aug. 7	7·0	17 48 13·19	...	122 27 7·8	R
9	7·0	48 13·24	...	27 7·4	R
20	7·0	48 13·41	...	27 6·4	R
347		*Lacaille* 7506.			
Aug. 14	7·0	17 48 43·90	...	116 44 54·4	R
17	7·0	48 43·87	...	44 56·6	R
22	7·0	48 43·90	...	44 54·2	R
348		*Lacaille* 7502.			
Aug. 8	7·0	17 48 46·41	...	122 40 2·1	R
16	...	48 46·49	...	40 2·6	R
21	7·0	48 46·60	...	40 3·1	R
349		*64 Ophiuchi ν*			
June 15	4·0	17 52 15·21	...	99 45 23·9	R
16	4·0	52 15·16	...	45 23·5	R
20	4·0	52 15·29	...	45 21·7	R
23	4·0	52 15·37	...	45 22·5	M
July 2	4·0	52 15·41	...	45 22·0	M
350		*θ Aræ.*			
June 16	4·0	17 57 3·40	...	140 5 48·9	R
21	4·0	57 3·23	...	5 48·8	R
25	4·0	57 3·29	...	5 46·9	M
July 10	4·0	57 3·46	...	5 48·6	M
23	4·5	57 3·27	...	5 44·7	M
351		*10 Sagittarii γ²*			
June 15	...	17 57 54·27	...	120 25 25·0	R
20	...	57 54·24	...	25 26·7	R
22	...	57 54·20	...	25 23·4	R
July 3	...	57 54·25	...	25 22·3	M
11	...	57 54·43	...	25 23·0	M
352		*Radcliffe* 3828.			
Aug. 14	...	17 59 56·25	...	41 32 25·5	R
16	...	59 56·17	...	32 26·7	R
Sep. 5	6·0	59 56·25	...	32 25·1	M
8	5·7	59 56·19	...	32 26·1	M
13	5·5	59 56·31	...	32 23·3	M

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
353		*Taylor* 8376.			
Aug. 7	5·0	18 0 17·27	...	118 28 6·5	R
9	5·0	0 17·38	...	28 7·0	R
Sep. 10	6·0	0 17·24	...	28 6·7	M
14	5·4	0 17·40	...	28 7·1	M
17	5·0	0 17·37	...	28 6·2	M
354		72 *Ophiuchi*.			
Aug. 8	4·0	18 1 31·13	...	80 27 7·1	R
20	4·0	1 31·21	...	27 7·0	R
Sep. 18	4·0	1 31·26	4	27 6·7	M
19	4·0	1 31·09	...	27 6·7	M
22	4·4	1 31·29	...	27 6·4	M
355		ϵ *Telescopii*.			
Aug. 22	4·5	18 2 5·89	...	135 58 22·9	R
356		*Lacaille* 7577.			
Aug. 21	5·0	18 3 59·58	...	153 5 4·9	R
27	5·0	3 59·79	...	5 4·5	R
357		13 *Sagittarii* μ^1			
July 2	...	18 6 24·37	...	111 5 18·7	M
4	...	6 24·61	...	5 18·5	M
5	...	6 24·38	...	5 18·8	M
13	...	6 24·48	...	5 19·6	M
23	...	6 24·33	...	5 20·2	M
30	...	6 24·32	...	5 19·4	M
Aug. 8	...	6 24·26	...	5 20·3	R
9	...	6 24·31	...	5 20·9	R
10	...	6 24·28	...	5 20·7	M
14	...	6 24·42	...	5 21·0	R
16	...	6 24·42	...	5 21·3	R
20	...	6 24·47	...	5 20·2	R
358		η *Sagittarii*.			
June 15	...	18 9 18·11	...	126 47 48·2	R
20	...	9 18·24	...	47 48·7	R
22	...	9 18·24	...	47 46·8	R
23	...	9 18·17	...	47 48·0	M
July 10	...	9 18·31	...	47 47·6	M

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
359		23 *Ursæ Minoris* δ			
June 28	...	18 12 0·98	3	3 23 28·6	M
July 4	...	12 0·13	2	23 29·8	M
Sep. 8	...	12 0·84	2	23 29·7	M
		23 *Ursæ Minoris* δ—*s.p.*			
Jan. 25	...	18 12 0·74	3	3 23 32·3	R
27	...	12 1·09	3	23 30·0	R
Feb. 16	...	12 1·52	3	23 32·8	M
24	...	12 0·47	3	23 30·9	M
27	...	12 0·46	3	23 31·4	M
360		19 *Sagittarii* δ			
June 16	3·5	18 13 7·11	...	119 52 42·5	R
21	3·5	13 7·11	...	52 41·6	R
25	3·6	13 7·09	...	52 42·7	M
July 11	3·6	13 7·29	...	52 40·8	M
19	3·7	13 7·09	...	52 40·8	M
361		58 *Serpentis* η			
June 29	4·0	18 14 56·73	...	92 55 45·3	M
30	4·2	14 56·59	...	55 46·7	M
July 5	4·0	14 56·46	...	55 45·7	M
20	4·0	14 56·86	...	55 46·1	M
30	4·0	14 56·54	...	55 46·1	M
362		20 *Sagittarii* ϵ			
June 15	...	18 16 0·27	...	124 26 28·7	R
July 2	...	16 0·26	...	26 24·0	M
Aug. 3	...	16 0·14	...	26 25·0	R
8	...	16 0·17	...	26 24·8	R
9	...	16 0·03	...	26 24·6	R
363		*a Telescopii*.			
June 16	4·0	18 17 51·10	...	136 2 1·0	R
20	4·0	17 50·93	...	2 0·9	R
July 10	4·0	17 51·08	...	2 1·1	M
Aug. 7	4·0	17 50·87	...	2 1·6	R
14	...	17 51·00	...	2 1·8	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
364		*Anon.*			
Aug. 20	9·0	18 17 55·28	4	121 49 11·3	R
22	8·9	17 55·29	...	49 10·9	R
27	8·9	17 55·40	...	49 11·6	R
Sep. 12	8·6	17 55·15	...	49 11·3	M
17	8·8	17 55·35	...	49 10·8	M
365		*Anon.*			
Aug. 21	7·7	18 19 5·96	...	121 26 28·8	R
24	7·8	19 5·99	...	26 27·5	R
25	7·7	19 6·06	...	26 29·6	R
366		*ζ Telescopii.*			
June 21	4·5	18 19 21·36	...	139 8 5·3	R
Aug. 8	4·5	19 21·14	...	8 2·6	R
Sep. 7	5·2	19 21·33	...	8 5·2	M
11	5·4	19 21·36	...	8 4·5	M
13	4·6	19 21·39	...	8 4·6	M
367		*ν Pavonis.*			
Sep. 14	5·9	18 19 52·92	...	152 21 11·2	M
18	5·0	19 53·21	...	21 11·1	M
368		*δ^1 Telescopii.*			
Aug. 21	5·0	18 22 38·64	...	135 59 40·3	R
27	5·0	22 38·62	...	59 41·0	R
Sep. 19	5·2	22 38·66	...	59 40·6	M
21	5·5	22 38·77	...	59 42·0	M
22	5·5	22 38·76	...	59 42·0	M
369		*δ^2 Telescopii.*			
Aug. 7	5·0	18 22 56·16	...	135 50 20·9	R
22	5·0	22 56·06	...	50 19·5	R
Sep. 24	5·5	22 56·00	...	50 20·8	M
25	6·0	22 56·03	...	50 21·7	M
27	5·9	22 56·19	...	50 21·4	M
370		*ζ Pavonis.*			
June 28	...	18 28 39·22	...	161 31 47·6	M
29	4·0	28 39·23	...	31 50·4	M
Aug. 25	4·0	28 39·10	...	51 52·4	R
Sep. 17	4·5	28 39·20	...	51 51·8	M
18	5·6	28 39·36	...	51 47·9	M

Number and Date.	Magnitude.	Mean Right Ascension. 1877. h. m. s.	No. of Wires.	Mean Polar Distance. 1877. ° ′ ″	Observer.
371		3 *Lyræ α, Vega.*			
June 30	...	18 32 46·41	...	51 19 46·5	M
July 3	...	32 46·40	...	19 46·1	M
4	...	32 46·56	...	19 47·0	M
21	...	32 46·45	...	19 47·6	M
23	...	32 46·46	...	19 46·7	M
Aug. 22	...	32 46·27	...	19 47·1	R
Sep. 5	...	32 46·36	...	19 47·4	M
11	...	32 46·46	...	19 48·4	M
13	...	32 46·36	...	19 48·2	M
14	...	32 46·39	...	19 48·0	M
15	...	32 46·36	...	19 48·4	M
19	...	32 46·45	...	19 48·0	M
372		*Taylor* 8577.			
Aug. 7	5·0	18 33 22·05	...	154 59 2·2	R
8	5·0	33 21·93	3	59 3·9	R
21	5·0	33 21·98	...	59 5·8	R
Sep. 12	5·0	33 22·08	...	59 2·4	M
22	5·0	33 22·23	...	59 3·7	M
373		λ *Coronæ Australis.*			
Aug. 14	...	18 35 20·62	...	128 26 22·8	R
24	5·5	35 20·50	...	26 23·7	R
Sep. 6	6·0	35 20·65	...	26 22·6	M
7	6·0	35 20·57	...	26 21·6	M
10	6·0	35 20·44	...	26 22·0	M
374		*θ Pavonis.*			
Aug. 25	5·0	18 36 31·86	...	155 12 4·2	R
27	5·0	36 31·80	...	12 4·5	R
Sep. 24	5·8	36 31·90	...	12 6·4	M
27	5·5	36 32·02	...	12 6·2	M
375		27 *Sagittarii* ϕ			
June 27	...	18 37 58·33	...	117 6 54·0	M
July 5	...	37 58·12	...	6 54·5	M
9	...	37 58·17	...	6 53·6	M
11	...	37 58·28	...	6 54·0	M
14	...	37 58·28	...	6 54·5	M

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
376		T *Aquilæ, Var.* 3.			
June 1	9·4	18 39 50·65	...	81 23 7·4	R
2	9·4	39 50·64	...	23 6·4	R
15	9·7	39 50·49	...	23 6·3	R
21	9·8	39 50·42	...	23 5·9	R
Aug. 3	9·7	39 50·55	4	23 8·4	R
7	9·7	39 50·49	...	23 10·1	R
9	9·8	39 50·56	...	23 10·3	R
14	...	39 50·62	...	23 9·1	R
20	9·8	39 50·63	...	23 9·4	R
22	10·0	39 50·70	...	23 9·5	R
377		λ *Pavonis.*			
Aug. 21	5·0	18 40 49·06	...	152 19 31·8	R
Sep. 13	5·0	40 49·17	...	19 33·0	M
17	5·0	40 49·12	...	19 32·9	M
18	5·0	40 49·02	...	19 33·0	M
22	5·9	40 49·03	...	19 32·4	M
378		κ *Telescopii.*			
Aug. 27	5·5	18 42 53·02	...	142 14 43·5	R
Sep. 12	5·8	42 54·09	...	14 43·0	M
25	5·9	42 54·11	...	14 45·7	M
28	5·9	42 53·97	...	14 45·0	M
379		κ *Pavonis.*			
Aug. 7	5·0	18 44 15·90	...	157 23 2·6	R
15	5·0	44 15·28	...	23 2·2	R
380		10 *Lyræ* β, *Var.* 1.			
July 21	...	18 45 32·27	...	56 46 43·0	M
23	...	45 32·32	...	46 44·7	M
Aug. 9	...	45 32·36	...	46 43·9	R
24	...	45 32·18	...	46 44·1	R
25	...	45 32·27	...	46 44·5	R
Sep. 3	...	45 32·28	...	46 45·4	R
7	...	45 32·32	...	46 45·4	M
10	...	45 32·30	...	46 46·2	M
14	...	45 32·31	...	46 44·3	M
15	...	45 32·23	...	46 44·9	M
21	...	45 32·34	...	46 44·8	M
381		34 *Sagittarii* σ			
June 15	...	18 47 38·15	...	116 26 50·7	R
20	...	47 38·12	...	26 49·7	R
30	...	47 38·27	...	26 50·0	M
July 2	...	47 38·32	...	26 49·5	M
10	...	47 38·35	...	26 50·1	M
382		ϵ *Coronæ Australis, Var.* 1.			
Aug. 14	5·5	18 50 25·45	...	127 15 57·4	R
15	...	50 25·47	4	15 58·4	R
21	5·5	50 25·52	...	15 56·8	R
Sep. 3	...	50 25·50	...	15 56·3	R
12	5·5	50 25·35	...	15 56·4	M
383		13 *Aquilæ* ϵ			
June 15	3·5	18 54 2·30	...	75 5 52·6	R
27	4·2	54 2·50	...	5 50·3	M
July 3	3·7	54 2·20	...	5 50·1	M
9	3·6	54 2·38	...	5 50·8	M
13	3·9	54 2·47	...	5 50·4	M
384		14 *Lyræ* γ			
June 29	3·5	18 54 20·82	...	57 28 41·8	M
July 19	3·4	54 20·62	...	28 41·5	M
21	3·5	54 20·73	...	28 40·2	M
23	3·9	54 20·65	...	28 41·9	M
30	3·5	54 20·67	...	28 41·4	M
385		38 *Sagittarii* ζ			
June 25	...	18 54 47·03	...	120 3 14·6	M
July 14	...	54 47·10	...	3 13·0	M
16	...	54 47·22	...	3 14·7	M
17	...	54 46·99	...	3 14·5	M
18	...	54 47·17	...	3 13·8	M
386		*R. P. L.* 131			
Aug. 27	...	18 54 54·85	3	3 26 55·9	R
		R. P. L. 131—*s.p.*			
Feb. 10	...	18 54 54·03	2	3 26 56·6	M

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
387	*γ Coronæ Australis.*				
Aug. 7	5·0	18 58 5·98	...	127 14 16·1	R
22	5·0	58 6·00	...	14 14·0	R
23	5·0	58 5·97	...	14 15·8	R
Sep. 7	5·1	58 6·18	...	14 15·6	M
11	5·0	58 5·96	...	14 16·0	M
388	*40 Sagittarii τ*				
June 30	4·0	18 59 15·52	...	117 50 52·1	M
July 10	4·0	59 15·54	...	50 54·4	M
11	4·0	59 15·50	...	50 51·7	M
Aug. 9	4·0	59 15·31	...	50 53·8	R
14	4·0	59 15·38	...	50 55·6	R
389	*16 Aquilæ λ*				
July 23	3·6	18 59 43·10	...	95 3 55·3	M
Aug. 4	...	59 43·29	...	3 54·2	R
Sep. 13	3·2	59 43·31	...	3 54·8	M
15	4·0	59 43·05	...	3 56·1	M
18	3·2	59 43·12	...	3 54·8	M
390	*17 Aquilæ ζ*				
Aug. 15	...	18 59 45·36	...	76 19 4·2	R
21	...	59 45·30	...	19 4·4	R
25	...	59 45·30	...	19 6·2	R
Sep. 3	...	59 45·38	...	19 4·4	R
8	...	59 45·44	...	19 5·3	M
391	*δ Coronæ Australis.*				
Aug. 24	5·0	18 59 46·98	...	130 41 6·1	R
Sep. 22	5·4	59 46·97	...	41 7·1	M
24	5·0	59 47·05	...	41 7·2	M
25	5·0	59 46·92	...	41 8·4	M
27	5·0	59 46·95	...	41 7·9	M
392	*α Coronæ Australis.*				
June 15	4·5	19 1 5·95	...	128 5 38·9	R
July 14	5·0	1 6·03	4	5 37·8	M
18	4·8	1 5·99	...	5 36·8	M
30	4·2	1 6·14	...	5 36·9	M
Aug. 27	4·5	1 5·96	...	5 38·2	R

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
393	*20 Aquilæ.*				
Aug. 14	5·0	19 6 0·48	...	98 8 35·1	R
21	5·0	6 0·32	...	8 34·8	R
22	5·0	6 0·41	...	8 35·0	R
Sep. 3	...	6 0·58	...	8 36·2	R
10	5·9	6 0·34	...	8 33·7	M
394	*25 Aquilæ ω*				
July 9	...	19 12 2·53	...	78 37 28·5	M
Aug. 8	...	12 2·50	...	37 30·5	R
16	...	12 2·53	...	37 30·6	R
24	...	12 2·50	...	37 29·2	R
27	...	12 2·51	...	37 28·9	R
Sep. 1	...	12 2·51	...	37 28·1	R
17	...	12 2·52	...	37 29·9	M
395	*S Sagittarii, Var.* 2.				
June 2	10·2	19 12 14·24	...	109 14 46·5	R
15	10·4	12 14·14	...	14 47·0	R
396	*57 Draconis δ*				
June 27	4·0	19 12 31·80	...	22 33 16·5	M
29	3·4	12 31·88	...	33 15·9	M
July 17	4·0	12 31·68	...	33 15·6	M
19	3·0	12 31·78	...	33 15·7	M
30	3·4	12 31·96	...	33 16·2	M
397	*β¹ Sagittarii.*				
June 28	3·5	19 13 47·47	...	134 41 17·1	M
July 11	3·7	13 47·43	...	41 14·6	M
Aug. 9	3·5	13 47·38	...	41 16·0	R
15	3·5	13 47·31	...	41 17·5	R
20	3·5	13 47·36	...	41 16·5	R
398	*1 Cygni κ*				
Sep. 14	4·5	19 14 15·40	...	36 51 27·6	M
24	4·2	14 15·47	...	51 26·8	M

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
399		*β*² *Sagittarii.*			
July 2	4·3	19 14 19·71	...	135 1 43·8	M
Sep. 12	4·0	14 19·88	...	1 45·5	M
13	4·5	14 19·84	...	1 44·7	M
15	5·0	14 19·64	...	1 45·0	M
18	4·0	14 19·88	...	1 45·1	M
400		46 *Sagittarii υ*			
Aug. 14	...	19 14 41·03	...	106 11 2·7	R
22	...	14 41·11	...	11 1·7	R
25	...	14 41·16	...	11 3·2	R
Sep. 3	...	14 41·20	...	11 3·0	R
21	...	14 41·04	...	11 2·6	M
401		*α Sagittarii.*			
July 20	4·0	19 15 21·57	...	130 50 42·5	M
Sep. 22	4·0	15 21·79	...	50 43·3	M
25	4·0	15 21·55	...	50 44·1	M
27	4·0	15 21·83	...	50 42·0	M
402		*Taylor* 8907—2*nd.*			
Aug. 21	6·0	19 17 54·86	...	144 34 5·7	R
24	6·0	17 54·73	...	34 5·3	R
Sep. 1	6·0	17 54·83	...	34 3·6	R
28	6·0	17 54·95	...	34 5·3	M
403		30 *Aquilæ δ*			
Aug. 16	...	19 19 17·65	...	87 7 43·7	R
23	...	19 17·70	...	7 43·2	R
Sep. 6	...	19 17·71	...	7 43·9	M
7	...	19 17·76	...	7 43·4	M
8	...	19 17·78	...	7 44·4	M
19	...	19 17·72	...	7 45·7	M
404		*μ Telescopii.*			
Aug. 22	4·0	19 20 35·30	...	145 21 33·5	R
27	...	20 35·28	...	21 33·5	R
Sep. 21	5·0	20 35·53	...	21 34·9	M
24	5·0	20 35·34	...	21 35·4	M
27	5·0	20 35·49	...	21 35·4	M

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
405		6 *Vulpeculæ α*			
Aug. 7	4·0	19 23 35·51	...	65 34 57·8	R
14	4·0	23 35·54	...	35 1·9	R
Sep. 12	4·0	23 35·24	...	34 59·1	M
13	4·0	23 35·27	...	34 59·1	M
17	4·0	23 35·28	...	34 58·5	M
406		6 *Cygni β*—1*st.*			
July 11	3·5	19 25 45·79	...	62 17 48·2	M
17	3·5	25 45·90	...	17 48·0	M
Aug. 3	3·0	25 45·83	...	17 49·4	R
4	...	25 46·07	...	17 50·6	R
9	3·0	25 46·05	...	17 52·6	R
407		6 *Cygni β*—2*nd.*			
July 18	...	19 25 47·82	...	62 17 29·8	M
20	...	25 47·83	...	17 31·0	M
Aug. 20	...	25 47·68	...	17 31·2	R
21	...	25 47·83	...	17 31·7	R
24	...	25 47·81	...	17 34·0	R
25	...	25 47·72	...	17 34·3	R
408		38 *Aquilæ μ*			
July 19	5·0	19 28 4·61	...	82 52 48·8	M
30	4·9	28 4·71	...	52 49·9	M
Sep. 1	4·5	28 4·75	...	52 49·0	R
10	4·6	28 4·54	...	52 50·0	M
14	4·6	28 4·69	...	52 50·4	M
409		52 *Sagittarii h*²			
Aug. 23	...	19 29 13·20	...	115 9 11·4	R
25	...	29 13·20	...	9 11·9	R
Sep. 3	...	29 13·29	...	9 11·4	R
410		39 *Aquilæ κ*			
Aug. 7	4·0	19 30 16·24	...	97 17 56·1	R
14	4·0	30 16·42	...	17 57·3	R
Sep. 6	5·0	30 16·45	...	17 57·5	M
7	4·9	30 16·52	...	17 57·0	M
8	4·5	30 16·27	...	17 57·1	M

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
411		41 *Aquilæ* ι			
Aug. 21	...	19 30 21·41	...	91 33 26·1	R
Sep. 15	...	30 21·17	...	33 27·0	M
17	...	30 21·34	...	33 26·0	M
18	...	30 21·38	...	33 26·3	M
22	...	30 21·26	...	33 27·0	M
412		*Radcliffe* 4400.			
Aug. 9	10·0	19 33 33·53	...	40 3 3·7	R
22	10·0	33 33·39	...	3 4·5	R
24	10·0	33 33·33	...	3 7·4	R
27	10·0	33 33·58	...	3 8·0	R
Oct. 2	10·0	33 33·34	...	3 4·1	R
413		12 *Cygni* φ			
Sep. 27	4·9	19 34 31·17	...	60 7 44·8	M
Oct. 4	4·0	34 30·96	...	7 45·4	R
5	4·0	34 31·00	...	7 46·2	R
6	4·0	34 31·06	...	7 45·1	R
9	4·0	34 31·02	...	7 44·9	R
414		5 *Sagittæ* a			
Aug. 20	4·0	19 34 35·81	...	72 16 3·5	R
25	4·0	34 35·78	...	16 4·8	R
Sep. 1	4·0	34 35·90	...	16 3·0	R
3	...	34 36·03	...	16 4·6	R
12	4·4	34 36·04	...	16 4·6	M
415		ν *Telescopii*.			
Aug. 7	5·5	19 37 57·08	...	146 39 21·0	R
8	5·5	37 57·05	...	39 20·3	R
Sep. 13	5·9	37 58·19	...	39 20·4	M
14	6·0	37 58·02	...	39 21·2	M
28	5·5	37 58·03	...	39 24·1	M
416		*Lacaille* 8195.			
Oct. 1	5·5	19 39 14·18	...	155 54 13·0	R
3	5·5	39 14·32	...	54 13·3	R
8	5·5	39 14·23	...	54 10·7	R

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
417		50 *Aquilæ* γ			
Aug. 14	...	19 40 24·69	...	79 41 6·0	R
15	...	40 24·64	...	41 5·6	R
27	...	40 24·80	...	41 5·7	R
Sep. 22	...	40 24·58	...	41 5·8	M
418		18 *Cygni* δ			
July 13	3·8	19 41 7·48	...	45 10 4·2	M
16	3·9	41 7·69	...	10 6·3	M
Aug. 3	3·5	41 7·69	...	10 6·7	R
20	3·5	41 7·57	...	10 6·7	R
24	3·5	41 7·55	...	10 8·8	R
419		*Anon.*			
Aug. 21	8·0	19 41 49·89	...	123 3 58·9	R
Sep. 1	8·0	41 49·93	...	3 59·3	R
24	7·9	41 49·78	...	4 0·1	M
25	7·9	41 50·00	...	4 1·0	M
Oct. 4	8·5	41 49·86	...	3 59·3	R
420		7 *Sagittæ* δ			
Aug. 8	4·0	19 41 54·28	...	71 46 5·2	R
23	4·0	41 54·05	...	46 3·8	R
Sep. 8	4·3	41 54·08	...	46 5·9	M
18	4·0	41 54·12	...	46 5·9	M
21	4·5	41 54·31	...	46 4·9	M
421		*Taylor* 9099.			
Aug. 22	6·0	19 42 48·94	...	145 16 52·6	R
Sep. 12	6·0	42 49·10	...	16 54·0	M
17	6·0	42 49·11	...	16 54·5	M
Oct. 2	6·0	42 48·90	...	16 55·6	R
10	6·0	42 48·91	...	16 53·4	R
422		*Taylor* 9125.			
July 17	8·0	19 44 9·35	...	56 52 9·2	M
18	7·9	44 9·40	...	52 8·6	M
Aug. 7	7·8	44 9·51	...	52 10·2	R
9	7·8	44 9·49	...	52 10·7	R
25	7·9	44 9·46	...	52 10·0	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
423		53 *Aquilæ α, Altair.*			
Sep. 6	...	19 44 46·79	...	81 27 17·9	M
7	...	44 46·84	...	27 17·5	M
10	...	44 46·82	...	27 17·9	M
11	...	44 46·86	...	27 17·4	M
424		*Lacaille* 8224.			
Oct. 5	5·5	19 45 57·03	...	159 29 1·0	R
9	5·5	45 57·00	3	29 0·9	R
425		*ι Sagittarii.*			
Oct. 3	4·5	19 46 46·25	...	132 11 23·6	R
6	4·5	46 46·01	...	11 25·1	R
426		μ^1 *Pavonis.*			
Oct. 1	5·5	19 48 23·38	...	157 16 14·8	R
4	5·6	48 23·44	...	16 16·7	R
8	5·5	48 23·42	...	16 14·1	R
427		60 *Aquilæ β*			
Aug. 15	...	19 49 16·26	...	83 53 56·9	R
23	...	49 16·22	...	53 55·6	R
Sep. 1	...	49 16·21	...	53 59·4	R
428		59 *Sagittarii b.*			
Aug. 9	5·0	19 49 23·66	...	117 29 38·7	R
14	...	49 23·63	...	29 41·3	R
20	5·0	49 23·53	...	29 41·1	R
Sep. 13	5·2	49 23·65	...	29 38·3	M
22	5·0	49 23·76	...	29 39·4	M
429		μ^2 *Pavonis.*			
Sep. 27	5·9	19 49 53·01	...	157 16 24·4	M
Oct. 13	5·5	49 53·00	...	16 27·6	R
15	5·5	49 52·95	...	16 24·3	R
16	5·5	49 52·86	...	16 23·0	R
17	5·5	49 52·93	...	16 25·2	R
430		61 *Sagittarii g.*			
Aug. 27	5·5	19 50 58·29	...	106 48 55·9	R
Sep. 14	5·9	50 58·29	...	48 57·3	M
21	5·8	50 58·23	...	48 57·0	M
25	6·0	50 58·37	...	48 58·8	M
28	5·7	50 58·38	...	48 59·1	M
431		60 *Sagittarii* A.			
Aug. 7	5·5	19 51 27·31	...	116 31 35·9	R
Sep. 6	6·1	51 27·19	...	31 37·6	M
17	5·8	51 27·28	...	31 36·4	M
18	5·7	51 27·45	...	31 37·4	M
Oct. 2	5·5	51 27·27	...	31 38·2	R
432		21 *Cygni η*			
July 19	...	19 51 41·59	...	55 14 32·8	M
20	...	51 41·46	...	14 33·6	M
Aug. 3	...	51 41·61	...	14 32·3	R
16	...	51 41·58	4	14 36·1	R
21	...	51 41·34	...	14 32·3	R
433		12 *Sagittæ γ*			
Aug. 20	4·5	19 53 16·82	...	70 50 26·9	R
Sep. 12	4·6	53 17·00	...	50 29·1	M
19	4·7	53 16·87	...	50 27·5	M
Oct. 18	4·5	53 17·01	...	50 26·1	R
19	4·5	53 16·96	...	50 28·1	R
434		62 *Sagittarii c.*			
Aug. 8	4·5	19 55 5·44	...	118 2 58·3	R
14	...	55 5·67	...	3 2·1	R
22	4·5	55 5·61	...	3 1·2	R
Oct. 1	4·5	55 5·52	...	3 2·4	R
3	4·5	55 5·64	...	3 2·1	R
435		*δ Pavonis.*			
Oct. 4	4·0	19 56 38·11	...	156 29 35·0	R
5	4·0	56 38·14	...	29 35·5	R
13	4·0	56 38·29	...	29 37·3	R

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
436		*O. A. S.* 20266.			
Sep. 24	6·3	20 1 32·77	...	105 22 57·5	M
25	6·2	1 32·65	...	22 59·4	M
28	6·6	1 32·62	...	22 59·3	M
Oct. 2	6·6	1 32·66	...	22 58·6	R
3	6·8	1 32·82	...	22 58·5	R
437		*O. A. S.* 20269.			
Oct. 1	9·0	20 1 52·32	...	105 46 8·2	R
5	8·8	1 52·12	...	46 8·0	R
10	9·0	1 52·24	...	46 4·9	R
438		~~*O. A. N.* 20046~~. *S. Capricorni*			
Oct. 6	10·5	20 2 55·79	...	32 22 2·4	R
8	10·5	2 55·66	...	22 1·6	R
13	10·5	2 55·47	...	22 0·3	R
15	10·5	2 55·61	...	22 0·9	R
16	10·4	2 55·72	...	22 0·7	R
17	10·3	2 55·79	...	22 0·1	R
18	10·3	2 55·70	...	21 58·0	R
19	10·2	2 55·64	...	21 57·9	R
20	10·1	2 55·72	...	21 58·7	R
22	10·1	2 55·78	...	21 59·3	R
439		65 *Aquilæ θ*			
July 19	3·9	20 4 57·56	...	91 11 4·8	M
20	4·0	4 57·46	...	11 5·3	M
Aug. 3	3·5	4 57·54	...	11 4·8	R
7	3·5	4 57·45	...	11 7·2	R
8	3·5	4 57·50	...	11 6·5	R
440		*Lacaille* 8363—1*st.*			
Aug. 9	9·0	20 5 2·66	...	147 20 27·1	R
21	9·0	5 2·77	...	20 28·0	R
Sep. 1	9·2	5 2·85	...	20 26·5	R
17	9·0	5 2·69	...	20 28·7	M
441		*Cordoba* XX. 180.			
Sep. 18	8·8	20 5 15·08	...	147 12 18·8	M
442		6 *Capricorni* a^2			
Aug. 27	...	20 11 13·67	...	102 55 28·0	R
Sep. 1	...	11 13·73	...	55 28·2	R
12	...	11 13·62	...	55 29·2	M
13	...	11 13·82	...	55 28·2	M
Oct. 1	...	11 13·74	...	55 28·8	R
3	...	11 13·71	...	55 29·1	R
5	...	11 13·67	...	55 29·4	R
19	...	11 13·67	...	55 29·7	R
443		8 *Capricorni ν*			
Aug. 8	5·0	20 13 50·52	...	103 8 39·3	R
Sep. 6	5·4	13 50·39	...	8 39·4	M
21	5·5	13 50·35	...	8 40·0	M
22	5·3	13 50·30	...	8 40·3	M
24	5·2	13 50·28	...	8 39·1	M
444		*U Cygni, Var* 6.			
July 20	9·2	20 15 47·58	...	42 29 35·0	M
Aug. 3	9·1	15 47·68	...	29 35·4	R
7	9·1	15 47·72	...	29 38·4	R
9	9·1	15 47·68	...	29 38·2	R
15	9·3	15 47·76	4	29 38·4	R
445		*O. A. N.* 20387—2*nd.*			
July 30	8·0	20 15 52·51	...	42 28 54·6	M
Aug. 21	8·0	15 52·27	...	28 54·9	R
22	8·0	15 52·49	...	28 55·4	R
Sep. 25	8·2	15 52·50	...	28 56·7	M
28	8·3	15 52·39	...	28 56·2	M
446		37 *Cygni γ*			
Sep. 8	...	20 17 48·85	...	50 8 8·9	M
13	...	17 49·03	...	8 8·1	M
Oct. 1	...	17 48·96	...	8 7·7	R
3	...	17 49·06	...	8 8·8	R
5	...	17 49·11	...	8 8·2	R

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
447		10 *Capricorni* π			
Aug. 7	5·0	20 20 16·72	...	108 36 47·9	R
27	5·0	20 16·84	...	36 47·6	R
Sep. 1	5·0	20 16·80	...	36 48·3	R
7	5·9	20 16·65	...	36 49·0	M
18	5·2	20 16·77	...	36 49·0	M
448		11 *Capricorni* ρ			
Aug. 22	...	20 21 50·61	...	108 13 6·7	R
24	...	21 50·66	...	13 8·0	R
Sep. 22	...	21 50·71	...	13 8·3	M
Oct. 2	...	21 50·52	...	13 8·4	R
4	...	21 50·56	...	13 7·7	R
13	...	21 50·55	...	13 8·3	R
20	...	21 50·57	...	13 7·2	R
449		*v Indi.*			
Aug. 8	5·5	20 25 27·86	...	134 55 54·7	R
9	5·5	25 27·86	...	55 51·0	R
20	5·5	25 27·50	4	55 51·4	R
Sep. 12	5·7	25 27·59	...	55 54·2	M
15	5·9	25 27·64	...	55 52·8	M
450		*R. P. L.* 143.			
Oct. 10	...	20 27 51·53	3	5 15 50·1	R
16	...	27 51·98	3	15 53·5	R
20	...	27 52·52	3	15 50·9	R
		R. P. L. 143—*s.p.*			
Jan. 31	...	20 27 51·81	2	5 15 49·7	R
Feb. 20	...	27 51·92	3	15 51·0	M
22	...	27 52·35	3	15 52·7	M
Mar. 19	...	27 51·75	3	15 52·2	R
28	...	27 51·54	3	15 52·1	R
451		*a Indi.*			
Aug. 3	3·0	20 28 54·28	...	137 43 8·5	R
14	...	28 54·40	...	43 9·5	R
21	3·0	28 54·19	...	43 6·9	R
Sep. 1	3·0	28 54·34	...	43 5·3	R
17	3·0	28 54·47	...	43 6·8	M

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
452		β *Pavonis.*			
Sep. 18	3·0	20 33 51·33	...	156 38 34·5	M
20	3·0	33 51·19	...	38 33·3	M
Oct. 1	3·0	33 51·17	...	38 36·0	R
2	3·0	33 51·16	...	38 35·7	R
3	3·0	33 51·20	...	38 35·6	R
453		η *Indi.*			
Aug. 8	5·5	20 35 0·15	...	142 21 31·8	R
9	5·5	35 0·19	...	21 30·9	R
21	5·5	35 0·14	...	21 30·8	R
Sep. 1	5·5	35 0·16	...	21 29·2	R
12	5·9	35 0·28	...	21 30·7	M
454		50 *Cygni a, Deneb.*			
July 31	...	20 37 14·34	...	45 9 29·8	M
Aug. 20	...	37 14·16	...	9 31·1	R
Sep. 5	...	37 14·36	...	9 29·3	M
10	...	37 14·39	...	9 31·6	M
11	...	37 14·32	...	9 30·9	M
13	...	37 14·22	...	9 30·6	M
14	...	37 14·35	...	9 31·3	M
15	...	37 14·43	...	9 32·0	M
17	...	37 14·42	...	9 31·3	M
24	...	37 14·30	...	9 29·8	M
25	...	37 14·34	...	9 31·1	M
Oct. 20	...	37 14·23	...	9 29·5	R
455		σ *Pavonis*—2*nd.*			
Aug. 27	4·5	20 37 37·68	...	159 13 26·5	R
Sep. 28	5·0	37 37·80	...	13 26·4	M
Oct. 4	4·5	37 37·62	...	13 25·7	R
5	4·5	37 37·63	...	13 23·6	R
6	4·5	37 37·68	...	13 22·0	R
456		12 *Delpini* γ—1*st.*			
Aug. 9	7·0	20 40 56·37	...	74 19 4·4	R
21	7·0	40 56·17	...	19 4·4	R
22	7·0	40 56·24	...	19 4·3	R
Sep. 21	7·0	40 56·35	...	19 4·1	M
22	7·0	40 56·26	...	19 3·9	M

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457 — 12 *Delphini* γ—2*nd*.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
Aug. 10	5·1	20 40 57·18	...	74 19 3·6	M
Sep. 1	4·0	40 57·20	...	19 3·7	R
Oct. 2	4·0	40 56·91	...	19 4·8	R
8	4·0	40 57·01	...	19 3·0	R
10	4·0	40 56·98	...	19 2·0	R

458 — 53 *Cygni* ε

Oct. 17	3·0	20 41 13·88	...	56 29 21·1	R

459 — 3 *Aquarii*.

Aug. 14	4·0	20 41 14·83	...	95 28 35·4	R
Sep. 27	4·3	41 14·65	...	28 35·4	M
Oct. 3	4·0	41 14·75	...	28 35·4	R
13	4·0	41 14·79	...	28 35·1	R
16	4·0	41 14·75	...	28 34·7	R

460 — ~~54~~ *Cygni* λ¹, *Var*. 5.

Aug. 3	6·3	20 42 16·20	...	56 4 36·6	R
23	6·3	42 16·12	...	4 37·0	R
25	6·5	42 16·10	...	4 38·1	R
Sep. 25	5·9	42 16·13	...	4 38·4	M
Oct. 6	6·0	42 15·93	...	4 37·0	R
22	6·4	42 16·17	...	4 38·9	R
24	6·5	42 16·15	...	4 36·1	R

461 — *a Microscopii*.

Aug. 8	4·5	20 42 16·76	...	124 13 59·4	R
Oct. 5	4·5	42 16·55	...	13 58·8	R
9	4·5	42 16·60	...	13 57·5	R
18	4·5	42 16·72	...	13 59·9	R
20	4·5	42 16·86	...	13 59·4	R

462 — ι *Indi*.

Oct. 1	5·5	20 42 35·84	...	142 3 52·4	R
4	5·5	42 35·83	...	3 52·3	R

463 — β *Indi*.

Aug. 27	4·0	20 45 11·04	...	148 54 58·9	R
Sep. 1	4·0	45 11·13	...	54 58·6	R
18	4·0	45 11·26	...	54 59·9	M
Oct. 2	4·0	45 11·13	...	55 0·2	R

464 — 32 *Vulpeculæ*.

Aug. 21	...	20 49 19·00	...	62 24 32·8	R
Sep. 24	...	49 19·02	...	24 33·3	M
28	...	49 19·04	...	24 34·6	M
Oct. 1	...	49 19·05	...	24 32·5	R
6	...	49 19·11	...	24 32·7	R
8	...	49 19·16	...	24 33·8	R
15	...	49 19·03	...	24 34·6	R
17	...	49 19·14	...	24 32·5	R
19	...	49 19·10	...	24 33·9	R

465 — ζ *Microscopii*.

Aug. 8	5·5	20 55 ~~5·05~~ 6·05	...	129 6 36·8	R
10	5·8	55 6·02	...	6 35·6	M
15	5·5	55 6·08	...	6 38·2	R
Sep. 1	5·5	55 5·93	...	6 37·4	R
11	5·7	55 6·01	...	6 37·6	M

466 — μ *Indi*.

Aug. 21	5·5	20 56 10·52	...	145 12 42·6	R
22	5·5	56 10·60	...	12 41·6	R
27	5·5	56 10·58	...	12 40·8	R
Sep. 13	5·8	56 10·73	...	12 43·5	M
17	5·5	56 10·57	...	12 42·0	M

467 — 64 *Cygni* ζ

Sep. 12	...	21 7 42·11	...	60 16 36·7	M
17	...	7 41·93	...	16 35·8	M
18	...	7 42·01	...	16 37·1	M
21	...	7 42·08	...	16 36·8	M
24	...	7 42·12	...	16 36·3	M
25	...	7 42·21	...	16 37·4	M
27	...	7 41·97	...	16 36·6	M
Oct. 3	...	7 41·99	...	16 37·4	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
Oct. 8	...	21 7 42·02	...	16 36·1	R
9	...	7 42·12	...	16 36·1	R
10	...	7 42·14	...	16 35·3	R
16	...	7 42·12	...	16 36·1	R
19	...	7 42·02	...	16 36·7	R
24	...	7 42·06	...	16 36·7	R
27	...	7 41·93	...	16 36·4	R
31	...	7 42·07	...	16 38·2	R
468		*29 Capricorni.*			
Aug. 7	5·0	21 8 56·12	...	105 40 53·3	R
10	5·3	8 56·11	...	40 52·6	M
15	5·0	8 56·08	...	40 54·8	R
Sep. 1	5·0	8 56·20	...	40 52·5	R
11	5·6	8 56·24	...	40 53·7	M
469		*θ Indi.*			
Aug. 8	5·5	21 11 4·96	...	143 57 46·8	R
Sep. 22	5·7	11 5·00	...	57 48·3	M
28	5·5	11 5·06	...	57 48·9	M
Oct. 4	5·5	11 5·06	...	57 47·1	R
5	5·5	11 5·05	...	57 48·0	R
470		*θ¹ Microscopii.*			
Aug. 9	5·5	21 12 53·32	...	131 19 40·9	R
22	5·5	12 53·10	...	19 41·7	R
Oct. 2	5·5	12 53·18	...	19 42·5	R
6	5·5	12 53·14	...	19 40·4	R
13	5·5	12 53·23	...	19 41·3	R
471		*γ Pavonis.*			
Aug. 27	3·0	21 16 15·00	...	155 55 16·8	R
Sep. 1	3·0	16 14·97	...	55 15·6	R
Oct. 1	3·0	16 15·11	...	55 15·9	R
3	3·0	16 15·18	...	55 15·6	R
5	3·0	16 15·11	...	55 16·1	R
472		*1 Pegasi.*			
Aug. 7	4·0	21 16 23·83	...	70 43 13·0	R
15	...	16 23·81	...	43 16·0	R
20	4·0	16 23·93	...	43 16·9	R
Sep. 15	4·4	16 23·69	...	43 15·4	M
20	4·5	16 23·55	...	43 14·2	M

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
473		*θ² Microscopii.*			
Aug. 8	6·0	21 16 33·89	...	131 31 57·4	R
Sep. 11	6·2	16 33·65	...	31 58·3	M
28	6·0	16 33·86	...	31 57·8	M
Oct. 9	6·0	16 33·76	...	31 58·1	R
10	6·0	16 33·75	...	31 56·8	R
474		*γ Indi.*			
Sep. 17	5·7	21 17 28·20	...	145 11 25·0	M
27	5·4	17 28·15	...	11 25·7	M
Oct. 4	5·0	17 27·99	...	11 25·1	R
6	5·0	17 27·97	...	11 24·0	R
8	5·0	17 27·94	...	11 24·9	R
475		*34 Capricorni ζ*			
Aug. 10	4·2	21 19 38·63	...	112 56 34·6	M
16	4·0	19 38·51	...	56 34·9	R
Sep. 21	4·4	19 38·53	...	56 33·8	M
22	4·2	19 38·43	...	56 34·7	M
25	4·0	19 38·48	...	56 36·8	M
476		*22 Aquarii β*			
Sep. 12	...	21 25 4·90	...	96 6 41·7	M
18	...	25 4·84	...	6 40·3	M
20	...	25 4·85	...	6 39·7	M
27	...	25 5·07	...	6 40·5	M
28	...	25 4·94	...	6 41·2	M
Oct. 2	...	25 4·85	...	6 40·7	R
4	...	25 4·83	...	6 41·1	R
8	...	25 4·86	...	6 40·7	R
10	...	25 4·89	...	6 40·2	R
13	...	25 4·91	...	6 41·1	R
15	...	25 4·87	...	6 41·1	R
17	...	25 4·92	...	6 41·0	R
22	...	25 4·84	...	6 42·4	R
25	...	25 4·90	...	6 40·0	R
27	...	25 4·93	...	6 40·2	R
Nov. 2	...	25 4·86	...	6 39·8	R

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Number and Date.	Magnitude.	Mean Right Ascension. 1877. h. m. s.	No. of Wires.	Mean Polar Distance. 1877. ° ′ ″	Observer.
477		39 *Capricorni* ϵ			
Aug. 10	...	21 30 11·46	...	110 0 57·8	M
20	...	30 11·24	...	0 58·4	R
21	...	30 11·21	...	0 58·6	R
Sep. 1	...	30 11·51	...	0 57·7	R
14	...	30 11·50	...	0 59·0	M
478		*Anon.*			
Oct. 16	9·0	21 30 19·27	...	133 59 2·9	R
479		41 *Capricorni.*			
Aug. 27	5·0	21 35 0·23	...	113 49 5·2	R
Sep. 15	5·9	35 0·09	...	49 4·5	M
21	5·5	35 0·33	...	49 5·1	M
22	5·0	35 0·24	...	49 3·7	M
25	5·0	35 0·18	...	49 6·0	M
480		43 *Capricorni* κ			
Aug. 21	5·0	21 35 47·46	...	109 25 33·2	R
Oct. 1	5·0	35 47·38	...	25 33·7	R
3	5·0	35 47·42	...	25 33·1	R
4	5·0	35 47·40	...	25 33·1	R
8	5·0	35 47·44	...	25 33·4	R
481		*V Cygni, Var.* 7.			
Oct. 16	10·2	21 36 53·12	...	47 43 11·7	R
17	10·3	36 53·28	...	43 10·3	R
18	10·3	36 53·09	...	43 10·0	R
20	10·5	36 53·09	...	43 11·8	R
22	10·4	36 53·10	...	43 12·2	R
25	10·4	36 52·94	...	43 12·5	R
27	10·5	36 52·91	5	43 11·3	R
31	10·5	36 53·03	...	43 8·8	R
Nov. 1	10·4	36 52·96	...	43 10·6	R
2	10·5	36 52·95	3	43 10·2	R
482		*Anon.*			
Oct. 2	9·2	21 37 17·37	...	47 44 22·1	R
6	9·3	37 17·31	...	44 21·4	R
9	9·2	37 17·44	...	44 22·8	R
13	9·5	37 17·43	...	44 20·5	R
15	9·5	37 17·42	...	44 22·5	R

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
483		9 *Piscis Australis* ι			
Sep. 1	4·5	21 37 36·93	...	123 35 8·3	R
Oct. 5	4·5	37 36·82	...	35 11·4	R
10	4·5	37 36·91	...	35 8·4	R
Nov. 6	4·5	37 36·99	...	35 8·8	R
7	4·5	37 36·98	...	35 9·4	R
484		8 *Pegasi* ϵ			
Sep. 5	...	21 38 8·73	...	80 41 15·5	M
Oct. 24	...	38 8·63	...	41 16·2	R
485		*o Indi.*			
Oct. 1	5·5	21 40 20·96	...	160 12 5·4	R
486		10 *Piscis Australis* θ			
Sep. 11	5·2	21 40 30·85	...	127 27 59·4	M
Oct. 3	5·0	40 30·92	...	28 0·6	R
4	5·0	40 30·92	...	28 1·5	R
8	5·0	40 30·92	...	28 1·6	R
17	5·0	40 30·74	...	27 58·8	R
487		*γ Gruis.*			
Aug. 20	3·0	21 46 28·35	...	127 56 33·0	R
Sep. 1	3·0	46 28·47	...	56 31·7	R
15	4·0	46 28·45	...	56 32·8	M
Oct. 2	3·0	46 28·37	...	56 35·0	R
3	3·0	46 28·44	...	56 34·0	R
488		16 *Pegasi.*			
Sep. 20	...	21 47 27·77	...	64 39 10·6	M
25	...	47 27·78	...	39 11·3	M
Oct. 5	...	47 28·07	...	39 12·2	R
18	...	47 27·98	...	39 10·7	R
Nov. 1	...	47 27·96	...	39 10·3	R
6	...	47 27·93	...	39 9·2	R
489		*π Indi.*			
Sep. 13	5·7	21 47 35·16	...	148 28 52·0	M
Oct. 6	5·5	47 34·96	...	28 51·9	R
10	5·5	47 35·22	...	28 50·9	R
15	5·5	47 35·04	...	28 52·4	R
17	5·5	47 35·08	...	28 50·7	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
490		*δ Indi.*			
Sep. 28	5·0	21 49 32·20	...	145 34 35·6	M
Oct. 8	5·0	49 32·03	...	34 33·7	R
20	5·3	49 32·26	...	34 35·7	R
24	5·0	49 32·02	...	34 34·9	R
25	5·0	49 31·94	...	34 32·9	R
491		*κ¹ Indi.*			
Sep. 11	5·6	21 49 47·24	6	149 35 50·8	M
Oct. 1	5·0	49 47·18	...	35 51·1	R
9	5·0	49 47·31	...	35 51·9	R
16	5·0	49 47·15	...	35 50·2	R
22	5·0	49 47·18	...	35 52·6	R
492		12 *Piscis Australis η*			
Aug. 20	5·0	21 53 45·86	...	119 2 35·5	R
Sep. 1	5·0	53 45·80	...	2 32·9	R
14	5·0	53 45·99	...	2 34·7	M
Oct. 2	5·0	53 45·94	...	2 35·9	R
3	5·0	53 46·01	...	2 36·0	R
4	5·0	53 46·03	...	2 36·4	R
493		*κ² Indi.*			
Oct. 1	5·5	21 57 11·70	...	150 13 50·9	R
13	5·5	57 11·79	...	13 49·6	R
15	5·5	57 11·80	...	13 48·8	R
Nov. 6	5·5	57 11·95	...	13 46·8	R
7	5·5	57 12·00	...	13 46·2	R
494		*λ Gruis.*			
Sep. 13	5·0	21 58 41·77	...	130 8 10·4	M
Oct. 5	5·0	58 41·65	...	8 11·1	R
17	5·0	58 41·55	...	8 10·4	R
18	5·0	58 41·66	...	8 10·2	R
24	5·0	58 41·75	...	8 11·3	R
495		34 *Aquarii a*			
Sep. 20	...	21 59 27·66	...	90 54 59·5	M
27	...	59 27·79	...	54 59·2	M
Oct. 6	...	59 27·82	...	54 59·9	R
9	...	59 27·89	...	55 0·6	R
Oct. 16	...	21 59 27·88	...	90 55 0·1	R
22	...	59 27·94	..	55 1·1	R
25	...	59 27·96	...	55 0·0	R
Nov. 2	...	59 27·90	..	54 59·1	R
496		22 *Pegasi ν*			
Sep. 10	...	21 59 28·66	...	85 32 30·5	M
Oct. 3	...	59 28·68	...	32 30·5	R
4	...	59 28·71	...	32 31·2	R
8	...	59 28·62	...	32 31·0	R
10	...	59 28·65	...	32 31·0	R
497		*α Tucanæ.*			
Sep. 11	3·6	22 10 3·65	...	150 52 20·0	M
12	2·0	10 3·66	...	52 19·7	M
13	2·5	10 3·61	...	52 18·4	M
Oct. 2	2·0	10 3·48	...	52 19·7	R
4	2·0	10 3·62	...	52 19·6	R
498		43 *Aquarii θ*			
Sep 18	...	22 10 20·59	...	98 23 40·2	M
28	...	10 20·46	...	23 40·4	M
Oct. 3	...	10 20·52	...	23 41·5	R
5	...	10 20·39	...	23 40·0	R
10	...	10 20·40	...	23 41·8	R
13	...	10 20·42	...	23 40·8	R
17	...	10 20·40	...	23 42·7	R
20	...	10 20·48	...	23 42·3	R
24	...	10 20·58	...	23 40·7	R
31	...	10 20·55	...	23 42·1	R
Nov. 1	...	10 20·46	...	23 41·8	R
3	...	10 20·44	...	23 40·7	R
6	...	10 20·44	...	23 39·7	R
499		*δ¹ Gruis.*			
Sep. 12	4·4	22 21 54·61	...	134 7 25·9	M
21	4·4	21 54·85	...	7 23·8	M
Oct. 3	4·0	21 54·85	...	7 25·7	R
9	4·0	21 54·66	...	7 23·5	R
10	4·0	21 54·65	...	7 25·1	R

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
500		δ^2 *Gruis.*			
Oct. 2	5·0	22 22 23·91	...	134 22 39·7	R
8	5·0	22 23·97	...	22 39·1	R
15	5·0	22 24·11	...	22 41·6	R
18	5·0	22 23·94	...	22 40·4	R
Nov. 6	5·0	22 24·01	...	22 39·1	R
501		*R. P. L.* 150.			
Sep. 10	...	22 22 49·06	3	4 30 41·4	M
17	...	22 49·43	3	30 42·2	M
27	...	22 48·91	3	30 41·7	M
Oct. 1	...	22 50·04	3	30 42·1	R
4	...	22 49·50	2	30 43·2	R
		R. P. L. 150—*s.p.*			
Mar. 22	...	22 22 49·82	3	4 30 45·0	R
Apl. 4	...	22 49·23	3	30 45·9	R
14	...	22 50·31	3	30 46·4	R
27	...	22 48·88	3	30 45·8	R
502		*R. P. L.* 151.			
Oct. 6	...	22 23 16·31	3	4 23 51·5	R
13	...	23 16·42	3	23 52·2	R
31	...	23 14·33	3	23 49·5	R
		R. P. L. 151.—*s.p.*			
Mar. 24	...	22 23 16·75	3	4 23 54·2	R
Apl. 10	...	23 16·22	3	23 52·0	R
17	...	23 16·52	3	23 53·5	R
503		17 *Piscis Australis* β			
Oct. 5	4·0	22 24 30·39	...	122 58 34·3	R
17	4·0	24 30·39	...	58 33·9	R
20	4·0	24 30·51	...	58 34·6	R
Nov. 7	4·0	24 30·65	...	58 34·4	R
12	4·0	24 30·50	...	58 33·5	R
504		62 *Aquarii* η			
Oct. 2	...	22 29 2·07	...	90 45 4·5	R
4	...	29 2·06	...	45 2·7	R
9	...	29 2·03	...	45 5·5	R
15	...	29 2·14	...	45 3·7	R
16	...	29 1·97	...	45 3·8	R
18	...	29 2·06	...	45 3·4	R
22	...	29 2·05	...	45 5·4	R
27	...	29 2·12	...	45 4·0	R
Nov. 1	...	29 2·10	...	45 2·9	R
3	...	29 2·03	...	45 2·8	R
7	...	29 2·07	...	45 2·3	R
10	...	29 2·04	...	45 2·1	R
17	...	29 2·08	...	45 3·5	M
19	...	29 2·09	...	45 3·3	M
20	...	29 2·05	...	45 3·4	M
505		18 *Piscis Australis* ϵ			
Sep. 1	4·0	22 33 50·87	...	117 41 7·2	R
5	4·5	33 51·03	...	41 3·9	M
Oct. 1	4·0	33 50·98	...	41 4·9	R
5	4·0	33 50·96	...	41 5·1	R
6	4·0	33 51·05	...	41 3·8	R
506		β *Gruis.*			
Oct. 3	3·0	22 35 18·77	...	137 31 39·3	R
4	3·0	35 18·76	...	31 39·5	R
8	3·0	35 18·65	...	31 37·3	R
9	3·0	35 18·64	...	31 36·2	R
Nov. 7	3·0	35 18·92	...	31 36·6	R
507		42 *Pegasi* ζ			
Sep. 8	...	22 35 19·36	...	79 48 35·1	M
22	...	35 19·51	...	48 34·7	M
Oct. 25	...	35 19·57	...	48 38·7	R
31	...	35 19·53	...	48 37·4	R
Nov. 2	...	35 19·58	...	48 36·0	R
10	...	35 19·54	...	48 36·5	R
12	...	35 19·61	...	48 34·8	R
16	...	35 19·61	...	48 36·9	M
Dec. 4	...	35 19·64	...	48 36·9	R

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
508		*44 Pegasi η*			
Sep. 11	3·2	22 37 14·06	...	60 25 19·2	M
17	3·4	37 14·18	...	25 20·0	M
Oct. 10	3·0	37 14·02	...	25 18·3	R
13	3·0	37 13·84	...	25 21·1	R
15	3·0	37 14·15	...	25 18·4	R
509		*ϵ Gruis.*			
Sep. 1	4·0	22 41 6·88	...	141 57 46·4	R
10	4·0	41 6·85	...	57 47·6	M
21	4·0	41 6·88	...	57 47·5	M
Oct. 2	4·0	41 6·82	...	57 48·1	R
3	4·0	41 6·84	...	57 47·2	R
510		*Anon.*			
Oct. 8	10·0	22 42 17·22	4	102 28 38·5	R
13	9·8	42 17·25	...	28 39·3	R
16	9·9	42 17·11	...	28 35·1	R
18	9·6	42 17·28	...	28 37·9	R
22	9·4	42 17·35	...	28 38·9	R
25	9·9	42 17·13	...	28 36·7	R
Nov. 7	9·8	42 17·11	...	28 35·1	R
12	9·5	42 17·21	...	28 35·9	R
30	9·8	42 17·39	...	28 35·4	R
Dec. 3	9·8	42 17·27	...	28 36·6	R
511		*Lalande* 44635.			
Oct. 9	8·3	22 42 57·42	...	101 59 58·3	R
15	8·0	42 57·68	...	59 57·9	R
17	8·0	42 57·68	...	59 55·9	R
20	8·2	42 57·62	...	59 57·5	R
24	8·5	42 57·63	...	59 56·8	R
27	8·3	42 57·49	...	59 57·5	R
31	8·4	42 57·31	...	59 56·4	R
Nov. 1	8·5	42 57·32	...	59 59·2	R
3	9·0	42 57·42	5	59 57·0	R
6	8·5	42 57·44	...	59 54·8	R
512		*W. B. E.* XXII. 918.			
Oct. 3	9·3	22 45 6·67	...	102 41 10·7	R
5	9·3	45 6·59	...	41 10·6	R
6	9·2	45 6·60	...	41 8·8	R
Nov. 10	9·3	45 6·52	...	41 8·5	R
Nov. 19	9·3	22 45 6·78	...	102 41 8·8	M
20	9·3	45 6·61	...	41 10·7	M
21	9·3	45 6·56	...	41 10·3	M
23	9·1	45 6·72	...	41 9·1	M
26	9·1	45 6·70	...	41 8·7	M
27	9·0	45 6·81	...	41 9·4	M
513		*73 Aquarii λ*			
Nov. 16	...	22 46 11·52	...	98 14 0·3	M
514		*74 Aquarii.*			
Oct. 10	6·6	22 47 0·19	...	102 16 13·5	R
20	6·8	47 0·32	...	16 12·5	R
22	6·8	47 0·38	...	16 12·4	R
24	6·9	47 0·32	...	16 9·1	R
25	6·8	47 0·33	...	16 9·4	R
515		*75 Aquarii.*			
Sep. 28	7·9	22 47 37·82	...	102 50 35·6	M
Oct. 1	7·8	47 37·78	...	50 34·6	R
2	7·6	47 37·75	...	50 35·8	R
4	8·0	47 37·71	...	50 34·9	R
9	8·2	47 37·73	...	50 33·7	R
13	7·8	47 37·74	...	50 35·8	R
15	7·9	47 37·89	...	50 34·7	R
16	7·9	47 37·94	...	50 34·2	R
17	7·9	47 37·93	...	50 33·2	R
18	8·2	47 37·77	...	50 35·2	R
516		*76 Aquarii δ*			
Sep. 1	3·0	22 48 7·11	...	106 28 26·1	R
17	3·2	48 7·07	...	28 27·2	M
Oct. 27	3·2	48 6·93	...	28 27·8	R
31	3·2	48 7·01	...	28 28·0	R
Nov. 1	3·3	48 7·00	...	28 26·3	R
517		*24 Piscis Australis α, Fomalhaut.*			
Nov. 28	...	22 50 51·07	...	120 16 26·9	M

Separate Results of Madras Meridian Circle Observations in 1877.

518 *W. B. E.* XXII. 1129.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
Oct. 1	9·3	22 55 2·02	...	102 44 34·2	R
2	9·3	55 2·03	...	44 35·1	R
5	9·3	55 1·96	...	44 34·7	R
6	9·2	55 1·98	...	44 33·5	R
9	9·3	55 1·88	...	44 35·1	R
10	9·3	55 1·81	...	44 34·9	R
13	9·3	55 1·76	...	44 34·9	R
15	9·3	55 1·98	...	44 34·1	R
Nov. 7	9·4	55 1·90	...	44 31·5	R
10	9·3	55 1·77	...	44 32·7	R

519 *O. A. S.* 22573.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
Oct. 16	9·0	22 56 14·03	...	110 2 35·7	R
20	9·2	56 14·13	...	2 35·8	R
22	9·4	56 14·13	...	2 35·6	R
24	9·5	56 14·22	3	2 32·6	R
25	9·3	56 14·20	...	2 37·1	R
Nov. 12	9·4	56 14·26	...	2 35·8	R

520 1 *Andromedæ o*

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
Sep. 10	4·0	22 56 15·69	...	48 20 4·2	M
11	4·4	56 15·58	...	20 4·2	M
Oct. 27	4·2	56 15·78	...	20 5·6	R
31	...	56 15·59	...	20 3·5	R
Nov. 1	4·2	56 15·49	5	20 5·5	R

521 *W. B. E.* XXII. 1204.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
Sep. 21	8·3	22 58 3·08	...	102 50 29·5	M
22	8·0	58 3·10	...	50 29·0	M
25	8·3	58 3·01	...	50 30·2	M
27	8·2	58 2·87	...	50 29·7	M
28	8·1	58 2·90	...	50 30·9	M
Oct. 3	8·5	58 2·86	...	50 28·8	R
4	8·6	58 2·99	...	50 30·0	R
8	8·3	58 2·93	...	50 29·2	R
17	8·0	58 2·89	...	50 28·0	R
18	8·6	58 2·98	...	50 28·7	R

522 54 *Pegasi a, Markab.*

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
Nov. 3	...	22 58 38·09	...	75 27 22·4	R
16	...	58 38·03	...	27 24·6	M
17	...	58 38·07	...	27 25·3	M
19	..	58 38·00	...	27 24·1	M
20	...	58 38·08	...	27 23·1	M
21	...	58 38·07	...	27 25·2	M
22	...	58 38·00	...	27 24·5	M
30	...	58 38·10	...	27 21·7	R
Dec. 3	...	58 38·02	...	27 21·7	R
4	...	58 38·01	...	27 22·1	R
6	...	58 37·95	...	27 22·2	R

523 *Lalande* 45213.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
Sep. 13	8·3	23 0 57·97	...	102 28 15·2	M
Oct. 2	8·0	0 57·81	...	28 14·0	R
5	8·1	0 57·92	...	28 15·4	R
6	8·1	0 57·73	...	28 13·3	R
9	8·2	0 57·90	...	28 14·0	R
10	8·2	0 57·92	...	28 12·1	R
13	8·2	0 58·05	...	28 15·8	R
15	8·0	0 57·90	...	28 16·4	R
20	8·2	0 57·99	...	28 14·7	R
24	8·5	0 58·00	...	28 15·6	R

524 *O. A. S.* 22620.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
Oct. 16	9·1	23 1 30·86	...	109 52 14·3	R
17	9·0	1 30·90	...	52 13·9	R
18	9·3	1 30·85	...	52 14·0	R
22	9·4	1 31·01	...	52 12·9	R
25	9·3	1 30·84	...	52 14·5	R
Nov. 6	9·5	1 30·92	...	52 15·3	R

525 *Lalande* 45504.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
Sep. 17	8·0	23 8 55·83	...	102 14 3·8	M
18	7·9	8 55·95	...	14 4·0	M
21	8·0	8 55·92	...	14 4·1	M
22	7·9	8 56·04	...	14 4·4	M
27	7·9	8 55·97	...	14 5·2	M
28	7·9	8 55·87	...	14 5·5	M
Oct. 1	7·9	8 55·96	...	14 4·3	R
3	8·0	8 55·90	...	14 4·3	R
4	8·5	8 55·88	...	14 3·6	R
6	8·0	8 55·91	...	14 2·2	R

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Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
526 *W. B. E.* XXIII. 143.					
Sep. 11	9·3	23 9 20·81	...	101 42 49·3	M
Oct. 2	9·3	9 21·01	...	42 50·2	R
5	9·3	9 21·09	...	42 50·7	R
9	9·3	9 21·01	...	42 49·4	R
10	9·3	9 20·86	3	42 48·6	R
13	9·0	9 21·11	...	42 50·3	R
15	9·0	9 21·11	...	42 49·6	R
16	9·3	9 21·06	...	42 49·4	R
18	9·3	9 20·93	...	42 49·2	R
20	9·3	9 20·96	...	42 48·9	R
527 *γ Tucanæ.*					
Dec. 11	4·0	23 10 14·48	...	148 54 34·9	R
12	4·0	10 14·21	4	54 35·8	R
13	4·0	10 14·51	...	54 35·8	R
528 6 *Piscium* γ					
Nov. 16	...	23 10 47·27	...	87 23 22·1	M
529 *Lalande* 45582.					
Sep. 13	7·9	23 11 14·81	...	102 23 4·6	M
Oct. 17	8·0	11 14·68	...	23 4·0	R
22	8·0	11 14·88	...	23 4·5	R
24	8·2	11 14·81	...	23 6·5	R
27	8·3	11 14·83	3	23 4·4	R
Nov. 3	8·5	11 14·68	...	23 4·3	R
7	8·5	11 14·70	...	23 1·8	R
21	7·9	11 14·73	...	23 5·7	M
22	7·9	11 14·76	...	23 3·9	M
26	7·8	11 14·86	...	23 4·7	M
530 *W. B. E.* XXIII. 193.					
Oct. 25	9·2	23 11 27·66	...	101 56 9·9	R
Nov. 1	9·3	11 27·74	...	56 9·5	R
19	9·0	11 27·93	...	56 9·7	M
20	9·1	11 27·63	...	56 11·7	M
27	8·9	11 27·86	...	56 11·0	M
29	9·0	11 27·93	...	56 10·5	M
30	9·4	11 27·79	...	56 11·8	R
Dec. 3	9·2	11 27·79	...	56 9·4	R
4	9·2	11 27·64	...	56 9·2	R
6	9·5	11 27·55	4	56 10·4	R

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
531 *S. Pegasi, Var.* 5.					
Oct. 6	10·3	23 14 18·99	...	81 45 14·2	R
9	10·5	14 19·16	...	45 14·8	R
13	9·9	14 19·10	...	45 11·5	R
15	9·9	14 19·04	...	45 10·2	R
16	10·0	14 19·08	...	45 10·1	R
18	10·2	14 19·10	...	45 11·1	R
31	10·0	14 19·17	...	45 11·1	R
Nov. 6	10·4	14 19·15	4	45 11·1	R
10	9·9	14 18·99	...	45 9·8	R
12	9·8	14 19·10	...	45 10·9	R
532 *Lalande* 45708.					
Sep. 10	8·1	23 14 28·38	...	101 12 18·8	M
25	8·2	14 28·40	...	12 21·4	M
Oct. 1	8·0	14 28·65	...	12 20·1	R
3	8·3	14 28·62	...	12 20·8	R
5	8·2	14 28·61	...	12 20·3	R
20	8·2	14 28·62	...	12 19·4	R
Dec. 4	8·2	14 28·42	4	12 20·6	R
10	8·2	14 28·41	...	12 19·0	R
11	8·3	14 28·52	...	12 18·5	R
12	...	14 28·61	4	12 19·1	R
533 *Lalande* 45777.					
Oct. 2	8·1	23 16 37·47	...	101 26 51·1	R
4	8·5	16 37·50	...	26 50·5	R
17	8·0	16 37·46	...	26 51·1	R
22	8·2	16 37·62	...	26 53·0	R
24	8·4	16 37·74	...	26 53·3	R
Nov. 1	8·2	16 37·64	...	26 51·9	R
3	8·5	16 37·46	...	26 52·8	R
22	8·0	16 37·63	...	26 51·2	M
26	8·0	16 37·63	...	26 51·5	M
27	7·9	16 37·61	...	26 51·6	M
534 *Lalande* 45885.					
Sep. 19	9·0	23 20 22·27	...	101 42 31·5	M
27	8·8	20 22·31	...	42 31·5	M
Oct. 3	8·7	20 22·10	...	42 31·3	R
10	9·0	20 22·07	3	42 29·4	R
13	9·1	20 22·25	...	42 32·5	R

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
Oct. 16	9·0	23 20 22·29	...	101 42 32·0	R
25	9·1	20 22·25	...	42 32·1	R
31	9·0	20 22·07	...	42 32·1	R
Nov. 6	9·3	20 22·30	...	42 29·2	R
10	9·2	20 22·08	...	42 30·5	R
535		*8 Piscium* κ			
Dec. 6	...	23 20 37·66	...	89 25 2·2	R
12	...	20 37·56	...	25 3·3	R
536		*W. B. E.* XXIII. 423.			
Oct. 1	9·0	23 22 29·75	...	100 46 41·2	R
4	9·5	22 29·66	...	46 40·6	R
18	9·2	22 29·54	...	46 42·2	R
Nov. 21	9·3	22 29·70	...	46 42·8	M
30	9·4	22 29·73	...	46 38·5	R
Dec. 13	9·5	22 29·69	...	46 41·3	R
14	9·8	22 29·55	...	46 40·8	R
15	10·2	22 29·58	...	46 40·9	R
537		*Lalande* 45965.			
Sep. 12	7·9	23 22 38·92	...	99 56 34·3	M
17	7·9	22 38·80	...	56 35·4	M
20	7·9	22 38·76	...	56 33·9	M
21	7·7	22 39·06	...	56 33·8	M
22	7·8	22 38·92	...	56 34·6	M
25	7·6	22 38·83	...	56 35·5	M
28	7·6	22 38·88	...	56 35·0	M
Oct. 15	8·0	22 39·04	...	56 34·3	R
20	8·0	22 38·98	...	56 33·5	R
22	8·0	22 38·94	...	56 32·3	R
538		*W. B. E.* XXIII 453.			
Oct. 2	9·2	23 23 52·12	...	101 7 39·8	R
6	9·2	23 52·13	...	7 39·7	R
17	9·2	23 52·06	...	7 37·9	R
Nov. 22	9·2	23 52·11	...	7 38·6	M
27	9·3	23 52·36	...	7 39·7	M
29	9·3	23 52·27	...	7 39·5	M
Dec. 3	9·3	23 52·30	...	7 37·5	R
4	9·3	23 52·20	...	7 38·3	R
10	9·2	23 52·31	...	7 37·6	R
11	9·5	23 52·20	...	7 37·2	R

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
539		*W. B. E.* XXIII. 463.			
Oct. 5	9·2	23 24 29·07	...	100 50 1·3	R
25	9·4	24 29·08	...	50 0·8	R
31	9·3	24 29·21	...	50 2·8	R
Nov. 1	9·3	24 29·24	...	50 4·7	R
3	9·5	24 29·20	...	50 3·7	R
6	9·5	24 29·26	...	50 1·4	R
10	9·3	24 28·92	...	50 0·2	R
12	9·3	24 29·08	...	49 59·9	R
17	9·3	24 29·02	...	50 1·7	M
19	9·3	24 29·13	...	50 1·7	M
540		*Lalande* 46123.			
Sep. 18	9·2	23 26 42·85	...	100 2 47·3	M
Oct. 3	9·3	26 42·79	...	2 48·1	R
9	9·3	26 42·73	3	2 46·8	R
13	9·2	26 42·71	...	2 49·2	R
15	9·2	26 42·88	...	2 47·6	R
16	9·2	26 42·91	...	2 47·7	R
18	9·2	26 42·74	...	2 47·2	R
20	9·2	26 42·94	...	2 47·4	R
22	9·3	26 43·06	...	2 49·1	R
24	9·5	26 43·00	...	2 47·7	R
541		*R. P. L.* 158—*s.p.*			
Apl. 20	...	23 27 49·26	3	3 22 19·8	R
542		17 *Piscium* ι			
Sep. 19	...	23 33 37·38	...	85 2 24·5	M
21	...	33 37·41	...	2 24·6	M
Oct. 1	...	33 37·36	...	2 25·1	R
6	...	33 37·43	...	2 25·3	R
Nov. 6	...	33 37·49	...	2 25·8	R
7	...	33 37·41	...	2 23·4	R
12	...	33 37·44	...	2 23·5	R
23	...	33 37·31	...	2 24·8	M
24	...	33 37·41	...	2 23·9	M
30	...	33 37·40	...	2 24·1	R
Dec. 4	...	33 37·38	...	2 24·3	R
6	...	33 37·44	...	2 26·0	R
11	...	33 37·39	...	2 23·3	R
12	...	33 37·39	...	2 24·2	R
14	...	33 37·32	...	2 25·5	R

Separate Results of Madras Meridian Circle Observations in 1877.

Number and Date.	Magnitude.	Mean Right Ascension 1877. h. m. s.	No. of Wires.	Mean Polar Distance 1877. ° ′ ″	Observer.
543		*δ Sculptoris.*			
Oct. 18	...	23 42 30·95	...	118 48 37·1	R
Nov. 10	...	42 31·01	...	48 36·3	R
20	...	42 30·92	...	48 37·8	M
26	...	42 30·98	...	48 38·2	M
28	...	42 30·89	...	48 39·2	M
29	...	42 31·07	...	48 40·3	M
Dec. 11	...	42 31·01	...	48 36·8	R
13	...	42 30·99	...	48 38·4	R
544		28 *Piscium* ω			
Nov. 7	...	23 52 59·63	...	83 49 0·6	R
12	...	52 59·65	...	49 0·6	R
Nov. 17	...	23 52 59·65	...	83 49 1·2	M
21	...	52 59·58	...	49 2·8	M
22	...	52 59·65	...	49 1·6	M
26	...	52 59·72	...	49 1·6	M
27	...	52 59·73	...	49 2·2	M
30	...	52 59·65	...	49 4·5	R
Dec. 3	...	52 59·67	...	49 3·0	R
12	...	52 59·76	...	49 2·0	R
545		2 *Ceti.*			
Sep. 19	4·5	23 57 26·43	...	108 1 15·4	M
20	5·0	57 26·29	...	1 14·9	M

MEAN POSITIONS OF STARS

OBSERVED WITH THE

MADRAS MERIDIAN CIRCLE

IN THE YEAR

1877

REDUCED TO JANUARY 1 OF THAT YEAR

Mean Positions of Stars for 1877, *January* 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension. h.	m.	s.	Mean Polar Distance. °	′	″	Observations.	Fraction of Year.
1	21 Androm. α (*Alpherat*) ..	2·1	...	0	2	2·00	61	35	19·9	2	0·89
2	11 Cassiopeiæ β	2·4	...	0	2	37·28	31	31	44·4	3	0·79
3	ϵ Phœnicis	4·0	3	0	3	9·63	136	25	35·4	3	0·75
4	88 Pegasi γ (*Algenib*) ...	3·0	...	0	6	54·15	75	30	2·3	4	0·92
5	8 Ceti ι	3·6	...	0	13	9·63	99	30	21·3	1	0·75
6	κ Phœnicis	4·0	2	0	20	8·96	134	21	44·3	2	0·75
7	α Phœnicis	2·0	2	0	20	11·96	132	58	28·2	2	0·78
8	12 Ceti	6·2	...	0	23	45·63	94	38	13·7	5	0·92
9	β Tucanæ—1st	4·0	3	0	25	53·97	153	38	11·0	3	0·81
10	β Tucanæ—2nd	4·0	2	0	25	54·87	153	38	36·5	2	0·84
11	31 Andromedæ δ	3·4	...	0	32	45·40	59	48	43·9	2	0·77
12	16 Ceti β	2·1	...	0	37	24·85	108	39	43·4	4	0·92
13	24 Cassiopeiæ η—1st ...	4·0	1	0	41	40·30	32	50	14·4	1	0·84
14	24 Cassiopeiæ η—2nd ...	8·2	1	0	41	40·55	32	50	19·0	1	0·83
15	27 Cassiopeiæ γ	2·3	...	0	49	18·03	29	56	58·3	2	0·84
16	2 Ursæ Minoris	4·5	...	0	52	14·88	4	24	15·3	4	0·79
17	R. P. L. 14	6·2	...	0	55	43·32	3	30	37·2	4	0·74
18	71 Piscium ϵ	4·5	...	0	56	33·64	82	46	21·2	5	0·93
19	β Phœnicis	3·5	1	1	0	35·44	137	22	39·2	1	0·83
20	υ Phœnicis	5·7	5	1	2	10·58	132	8	42·7	5	0·91
21	31 Ceti η	3·6	...	1	2	24·02	100	50	4·2	3	0·86
22	ι Tucanæ	5·1	5	1	2	26·01	152	25	59·2	5	0·92
23	43 Andromedæ β (*Mirach*).	2·2	...	1	2	50·89	55	1	57·1	3	0·89
24	33 Cassiopeiæ θ	4·4	...	1	3	37·12	35	30	17·6	5	0·93
25	Lalande 2186	9·1	5	1	7	15·98	81	40	41·6	5	0·84
26	1 Ursæ Minoris α (*Polaris*)	2·2	...	1	13	41·02	1	20	50·8	9	0·51
27	37 Cassiopeiæ δ	2·8	...	1	17	47·18	30	24	18·0	2	0·84
28	45 Ceti θ	3·8	...	1	17	52·46	98	49	6·3	4	0·93
29	R Sculptoris, Var. 1 ...	7·2	5	1	21	18·11	123	10	54·8	5	0·91
30	γ Phœnicis	3·0	2	1	23	1·20	133	56	55·4	2	0·84
31	99 Piscium η	3·7	...	1	24	54·19	75	17	20·1	4	0·94
32	δ Phœnicis	4·0	2	1	26	7·49	139	42	45·7	2	0·85
33	106 Piscium ν	4·7	...	1	35	1·89	85	8	8·0	4	0·98
34	52 Ceti τ	3·6	...	1	38	20·98	106	35	7·7	1	0·84
35	55 Ceti ζ	3·9	...	1	45	23·53	100	56	35·5	2	0·86

16.—12 R. P. L. 17.—Groombridge 195. 25.—Comparison star for Clytie in 1877.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.*
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
1	21 Andromedæ α ...	+ 3·0787	+ 0·0182	+ 0·010	− 20·054	+ 0·013	+ 0·16	3215
2	11 Cassiopeiæ β ...	+ 3·0971	+ 0·0514	+ 0·066	− 20·053	+ 0·014	+ 0·19	3216
3	ε Phœnicis	+ 3·0528	− 0·0289	+ 0·008	− 20·053	+ 0·015	+ 0·19	Stone
4	88 Pegasi γ	+ 3·0826	+ 0·0100	− 0·001	− 20·046	+ 0·022	+ 0·01	1
5	8 Ceti ι	+ 3·0595	− 0·0023	− 0·003	− 20·021	+ 0·034	+ 0·03	14
6	κ Phœnicis	+ 2·9575	− 0·0239	...	− 19·977	+ 0·047	...	...
7	α Phœnicis	+ 2·9626	− 0·0227	+ 0·022	− 19·977	+ 0·047	+ 0·40	Stone
8	12 Ceti	+ 3·0610	+ 0·0008	− 0·000	− 19·947	+ 0·055	+ 0·01	38
9	β Tucanæ—1st ...	+ 2·7681	− 0·0446	+ 0·008	− 19·926	+ 0·054	+ 0·03	Stone
10	β Tucanæ—2nd ...	+ 2·7678	− 0·0446	+ 0·008	− 19·926	+ 0·054	+ 0·03	Stone
11	31 Andromedæ δ ...	+ 3·1830	+ 0·0221	+ 0·010	− 19·849	+ 0·075	+ 0·08	57
12	16 Ceti β	+ 2·9989	− 0·0055	+ 0·015	− 19·788	+ 0·080	− 0·03	70
13	24 Cassiopeiæ η—1st.	+ 3·4468	+ 0·0606	+ 0·135	− 19·723	+ 0·099	+ 0·48	79
14	24 Cassiopeiæ η—2nd.							
15	27 Cassiopeiæ γ ...	+ 3·5675	+ 0·0714	+ 0·001	− 19·593	+ 0·119	+ 0·02	99
16	2 Ursæ Minoris ...	+ 6·9954	+ 1·3457	+ 0·068	− 19·536	+ 0·239	+ 0·01	92
17	R. P. L. 14.	+ 8·3191	+ 2·0897	+ 0·054	− 19·464	+ 0·300	+ 0·02	95
18	71 Piscium ε... ...	+ 3·1137	+ 0·0087	− 0·007	− 19·447	+ 0·119	− 0·04	113
19	β Phœnicis	+ 2·6926	− 0·0183	− 0·006	− 19·358	+ 0·111	+ 0·04	Stone
20	υ Phœnicis	+ 2·7480	− 0·0151	...	− 19·322	+ 0·115	...	...
21	31 Ceti η	+ 3·0034	+ 0·0000	+ 0·013	− 19·316	+ 0·126	+ 0·12	141
22	ι Tucanæ	+ 2·3832	− 0·0249	+ 0·003	− 19·316	+ 0·102	− 0.01	Stone
23	43 Andromedæ β ...	+ 3·3255	+ 0·0286	+ 0·014	− 19·305	+ 0·139	+ 0·08	140
24	33 Cassiopeiæ θ ...	+ 3·5858	+ 0·0588	+ 0·023	− 19·287	+ 0·151	+ 0·02	142
25	Lalande 2186 ...	+ 3·1288	+ 0·0099	...	− 19·197	+ 0·140	...	...
26	1 Ursæ Minoris α ...	+ 21·0330	− 15·2933	+ 0·108	− 19·027	+ 0·977	+ 0·00	102
27	37 Cassiopeiæ δ ...	+ 3·8308	+ 0·0773	+ 0·038	− 18·910	+ 0·194	+ 0·04	180
28	45 Ceti θ	+ 3·0031	+ 0·0018	− 0·007	− 18·908	+ 0·154	+ 0·20	184
29	R Sculptoris	+ 2·7685	− 0·0085	...	− 18·806	+ 0·148	...	...
30	γ Phœnicis	+ 2·6155	− 0·0125	− 0·004	− 18·752	+ 0·143	+ 0·24	Stone
31	99 Piscium η... ...	+ 3·1993	+ 0·0141	− 0·000	− 18·694	+ 0·177	+ 0·00	203
32	δ Phœnicis	+ 2·4935	− 0·0139	+ 0·009	− 18·656	+ 0·141	− 0·14	Stone
33	106 Piscium ν ...	+ 3·1181	+ 0·0091	− 0·003	− 18·355	+ 0·191	− 0·01	228
34	52 Ceti τ	+ 2·9065	− 0·0004	− 0·122	− 18·236	+ 0·184	− 0·86	233
35	55 Ceti ζ	+ 2·9575	+ 0·0023	+ 0·000	− 17·971	+ 0·199	+ 0·03	247

* Where only a number is given the authority is Auwers-Bradley.

Mean Positions of Stars for 1877, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension. h.	m.	s.	Mean Polar Distance. °	′	″	Observations.	Fraction of Year.
36	45 Cassiopeiæ ϵ	3·6	...	1	45	33·80	26	56	12·0	3	0·84
37	6 Arietis β	2·8	...	1	47	50·77	69	47	39·4	3	0·98
38	χ Eridani	4·0	1	1	51	10·09	142	13	18·6	1	0·01
39	α Hydri	3·0	2	1	54	53·79	152	10	9·5	2	0·84
40	57 Andromedæ γ—1st ...	2·2	...	1	56	21·17	48	15	40·0	4	0·43
41	57 Andromedæ γ—2nd ...	5·0	3	1	56	22·07	48	15	37·0	2	0·03
42	13 Arietis α	2·0	...	2	0	14·43	67	7	13·7	3	0·97
43	4 Trianguli β	3·1	...	2	2	13·69	55	35	44·2	5	0·92
44	μ Fornacis	5·2	5	2	7	29·62	121	18	5·8	5	0·91
45	8 Trianguli δ	5·0	...	2	9	32·81	56	20	24·6	3	0·95
46	9 Trianguli γ	5·5	5	2	10	0·20	56	43	21·6	5	0·93
47	π^1 Hydri	5·7	2	2	11	40·80	158	25	1·5	2	0·98
48	ϕ Eridani	4·0	3	2	12	6·64	142	4	56·7	3	0·03
49	π^2 Hydri	5·9	1	2	12	55·11	158	18	59·2	1	0·97
50	S Persei, Var. 4	10·6	2	2	14	2·44	31	58	37·4	2	0·01
51	... ...	8·9	1	2	14	27·36	31	43	42·9	1	0·03
52	κ Fornacis	5·4	5	2	16	54·94	114	22	33·7	5	0·91
53	Taylor 798	5·5	2	2	17	22·52	133	45	47·0	2	0·93
54	24 Arietis ξ	5·4	...	2	18	13·62	79	56	50·6	5	0·96
55	Radcliffe 706	4·5	2	2	18	57·52	23	9	7·7	2	0·95
56	δ Hydri	4·0	3	2	19	34·00	159	13	12·9	3	0·02
57	73 Ceti ξ^2	4·4	...	2	21	37·09	82	5	30·9	1	0·00
58	R. P. L. 26	8·0	...	2	25	53·17	3	29	24·6	1	0·92
59	82 Ceti δ	4·1	...	2	33	10·84	90	12	12·5	1	0·02
60	ι Eridani	4·0	2	2	35	48·62	130	22	59·3	2	0·02
61	86 Ceti γ—2nd	3·6	...	2	36	55·73	87	17	1·1	4	0·50
62	89 Ceti π	4·3	...	2	38	16·10	104	22	50·1	3	0·02
63	41 Arietis	3·8	...	2	42	44·56	63	14	51·2	3	0·02
64	3 Eridani η	4·0	...	2	50	25·01	99	23	17·3	2	0·01
65	θ Eridani—1st	3·5	2	2	53	35·70	130	47	55·7	2	0·02
66	θ Eridani 2nd	5·5	2	2	53	36·72	130	47	54·6	2	0·03
67	92 Ceti α (*Menkar*) ...	2·7	...	2	55	51·04	86	23	36·3	4	0·74
68	11 Eridani τ^3	4·1	...	2	56	58·07	114	6	28·0	2	0·03
69	R. P. L. 33	5·8	...	3	3	29·86	5	31	46·8	4	0·58
70	57 Arietis δ	4·5	...	3	4	35·86	70	44	24·0	5	0·02

58.—Carrington 352.

69.—Groombridge 595.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	″	″	″	
36	45 Cassiopeiæ ϵ ...	+ 4·2422	+ 0·0993	+ 0·004	− 17·964	+ 0·283	+ 0·02	239
37	6 Arietis β	+ 3·2954	+ 0·0183	+ 0·005	− 17·874	+ 0·226	+ 0·10	252
38	χ Eridani	+ 2·2677	− 0·0087	+ 0·067	− 17·739	+ 0·162	− 0·25	Stone
39	α Hydri	+ 1·8552	− 0·0027	+ 0·034	− 17·587	+ 0·138	− 0·01	Stone
40	57 Androm. γ—1st ...	+ 3·6521	+ 0·0393	+ 0·002	− 17·525	+ 0·266	+ 0·05	276
41	57 Androm. γ—2nd...	+ 3·6522	+ 0·0393	+ 0·002	− 17·525	+ 0·266	+ 0·05	276
42	13 Arietis α	+ 3·3549	+ 0·0203	+ 0·013	− 17·357	+ 0·252	+ 0·13	287
43	4 Trianguli β ...	+ 3·5377	+ 0·0304	+ 0·012	− 17·269	+ 0·269	+ 0·03	290
44	μ Fornacis	+ 2·6429	− 0·0032	− 0·003	− 17·031	+ 0·210	− 0·08	Stone
45	8 Trianguli δ ...	+ 3·5491	+ 0·0296	+ 0·090	− 16·935	+ 0·284	+ 0·22	317
46	9 Trianguli γ ...	+ 3·5437	+ 0·0292	...	− 16·913	+ 0·284	...	...
47	π^1 Hydri	+ 1·2355	+ 0·0211	...	− 16·834	+ 0·105	...	...
48	ϕ Eridani	+ 2·1368	− 0·0044	+ 0·005	− 16·815	+ 0·177	+ 0·05	Stone
49	π^2 Hydri	+ 1·2295	+ 0·0213	...	− 16·775	+ 0·105	...	...
50	S Persei	+ 4·2545	+ 0·0782	...	− 16·722	+ 0·348	...	...
51	... ...	+ 4·2693	+ 0·0791	...	− 16·700	+ 0·350	...	...
52	κ Fornacis	+ 2·7315	− 0·0007	...	− 16·581	+ 0·231	...	...
53	Taylor 798	+ 2·3498	− 0·0043	...	− 16·558	+ 0·200	...	...
54	24 Arietis ξ	+ 3·2067	+ 0·0126	− 0·001	− 16·516	+ 0·272	+ 0·01	338
55	Radcliffe 706 ...	+ 4·8538	+ 0·1310	...	− 16·480	+ 0·410	...	...
56	δ Hydri	+ 1·0569	+ 0·0292	− 0·010	− 16·449	+ 0·095	− 0·01	Stone
57	73 Ceti ξ^2	+ 3·1798	+ 0·0117	+ 0·001	− 16·346	+ 0·276	+ 0·00	347
58	R. P. L. 26	+ 16·1022	+ 3·7372	...	− 16·127	+ 1·403	...	...
59	82 Ceti δ	+ 3·0692	+ 0·0081	+ 0·000	− 15·740	+ 0·284	+ 0·01	372
60	ι Eridani	+ 2·3573	− 0·0020	+ 0·003	− 15·588	+ 0·223	+ 0·06	Stone
61	86 Ceti γ—2nd ...	+ 3·1124	+ 0·0094	− 0·011	− 15·534	+ 0·294	+ 0·16	383
62	89 Ceti π	+ 2·8538	+ 0·0033	− 0·003	− 15·459	+ 0·272	+ 0·01	388
63	41 Arietis	+ 3·5116	+ 0·0229	+ 0·003	− 15·208	+ 0·340	+ 0·12	395
64	3 Eridani η	+ 2·9229	+ 0·0052	+ 0·004	− 14·761	+ 0·294	+ 0·22	413
65	θ Eridani—1st ...	+ 2·2793	− 0·0004	...	− 14·571	+ 0·234	...	...
66	θ Eridani—2nd ...	+ 2·2793	− 0·0004	...	− 14·571	+ 0·234	...	...
67	92 Ceti α	+ 3·1307	+ 0·0098	− 0·003	− 14·435	+ 0·323	+ 0·07	428
68	11 Eridani τ^3 ...	+ 2·6548	+ 0·0018	− 0·012	− 14·366	+ 0·276	+ 0·04	434
69	R. P. L. 33	+ 12·9850	+ 1·6053	+ 0·045	− 13·963	+ 1·365	+ 0·12	402
70	57 Arietis δ	+ 3·4091	+ 0·0171	+ 0·010	− 13·893	+ 0·364	− 0·01	446

Mean Positions of Stars for 1877, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension. h.	m.	s.	Mean Polar Distance. °	′	″	Observations.	Fraction of Year.
71	12 Eridani	3·8	...	3	6	50·68	119	28	24·0	1	0·03
72	13 Eridani ζ	4·8	...	3	9	51·39	99	16	39·1	2	0·01
73	16 Eridani τ^4	3·8	...	3	14	2·54	112	12	25·6	4	0·01
74	18 Eridani ε	3·7	...	3	27	7·95	99	52	32·9	4	0·02
75	19 Eridani τ^5	4·2	...	3	28	21·36	112	2	47·5	4	0·02
76	39 Persei δ	3·2	...	3	34	10·23	42	36	27·4	5	0·18
77	23 Eridani δ	3·7	...	3	37	21·31	100	10	52·1	4	0·03
78	25 Tauri η (*Alcyone*) ...	3·0	...	3	40	10·47	66	16	37·2	6	0·03
79	26 Eridani π	4·4	...	3	40	19·62	102	29	18·8	5	0·93
80	27 Eridani τ^6	4·3	...	3	41	33·31	113	36	52·5	5	0·93
81	υ^3 Eridani...	4·0	3	3	44	50·91	126	34	25·3	3	0·02
82	Lalande 7193	7·4	5	3	47	26·62	73	44	38·0	5	0·92
83	34 Eridani γ^1	3·0	...	3	52	17·41	103	51	35·5	7	0·03
84	R. P. L. 35	6·7	...	3	58	32·56	4	46	18·3	2	0·03
85	T Tauri, Var. 4	11·0	2	4	4	34·57	68	30	36·0	2	0·06
86	38 Eridani o^1	4·1	...	4	5	51·62	97	9	34·3	5	0·02
87	γ Doradûs...	4·0	4	4	12	48·04	141	47	51·7	4	0·03
88	α Reticuli	3·5	5	4	12	50·64	152	46	57·5	5	0·04
89	41 Eridani υ^4	3·3	...	4	13	14·21	124	6	1·8	4	0·03
90	43 Eridani υ^5	4·0	...	4	19	24·78	124	18	13·4	4	0·02
91	74 Tauri ε	3·7	...	4	21	26·09	71	5	39·6	10	0·06
92	87 Tauri α (*Aldebaran*) ...	1·0	...	4	28	51·85	73	44	22·8	4	0·06
93	48 Eridani ν	4·1	...	4	30	10·47	93	36	21·1	5	0·07
94	52 Eridani υ^7	3·8	...	4	30	46·22	120	48	54·4	5	0·07
95	α Doradûs...	3·0	3	4	31	20·19	145	17	59·2	3	0·02
96	53 Eridani...	3·9	...	4	32	32·73	104	32	44·4	5	0·09
97	54 Eridani...	4·5	...	4	35	3·70	109	54	32·0	5	0·07
98	3 Aurigæ ι	2·7	...	4	48	59·05	57	1	50·6	12	0·09
99	2 Leporis ε	3·3	...	5	0	15·23	112	32	15·6	7	0·10
100	67 Eridani β	2·9	...	5	1	48·16	95	14	49·4	5	0·07
101	69 Eridani λ	4·4	...	5	3	15·59	98	54	48·1	5	0·07
102	μ Doradûs, Var. 1 ...	9·7	7	5	5	54·47	151	57	50·0	7	0·02
103	19 Orionis β (*Rigel*) ...	0·3	...	5	8	37·62	98	20	43·7	3	0·09
104	... ...	9·2	5	5	10	53·73	152	11	6·5	5	0·06
105	20 Orionis τ	3·6	...	5	11	38·13	96	58	42·8	5	0·07

82.—Comparison star for Asia in 1877.

84.—Groombridge 750.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
71	12 Eridani	+ 2·5223	+ 0·0012	+ 0·025	− 13·751	+ 0·273	− 0·66	454
72	13 Eridani ζ	+ 2·9113	+ 0·0056	− 0·002	− 13·557	+ 0·318	− 0·04	457
73	16 Eridani τ^4	+ 2·6634	+ 0·0026	+ 0·001	− 13·285	+ 0·297	− 0·04	469
74	18 Eridani ε	+ 2·8894	+ 0·0055	− 0·068	− 12·407	+ 0·336	− 0·01	493
75	19 Eridani τ^5	+ 2·6451	+ 0·0030	+ 0·001	− 12·321	+ 0·309	+ 0·04	495
76	39 Persei δ	+ 4·2419	+ 0·0417	+ 0·001	− 11·917	+ 0·502	+ 0·04	499
77	23 Eridani δ	+ 2·8772	+ 0·0055	− 0·008	− 11·692	+ 0·346	− 0·74	515
78	25 Tauri η	+ 3·5538	+ 0·0177	− 0·000	− 11·490	+ 0·430	+ 0·04	521
79	26 Eridani π	+ 2·8294	+ 0·0049	+ 0·000	− 11·475	+ 0·343	− 0·07	526
80	27 Eridani τ^6 ...	+ 2·5912	+ 0·0030	− 0·013	− 11·391	+ 0·316	+ 0·53	530
81	υ^2 Eridani	+ 2·2477	+ 0·0026	− 0·008	− 11·152	+ 0·277	+ 0·07	Stone
82	Lalande 7193... ...	+ 3·3987	+ 0·0142	...	− 10·964	+ 0·467	...	...
83	34 Eridani γ^1 ...	+ 2·7923	+ 0·0047	+ 0·003	− 10·606	+ 0·351	+ 0·11	546
84	R. P. L. 35	+ 16·8909	+ 1·8099	+ 0·057	− 10·137	+ 2·125	− 0·05	Gr.
85	T. Tauri, Var. 4 ...	+ 3·5335	+ 0·0146	...	− 9·678	+ 0·455	...	...
86	38 Eridani o^1 ...	+ 2·9247	+ 0·0058	− 0·001	− 9·578	+ 0·379	− 0·09	568
87	γ Doradûs	+ 1·5558	+ 0·0076	+ 0·004	− 9·042	+ 0·206	− 0·10	Stone
88	α Reticuli	+ 0·7518	+ 0·0216	+ 0·005	− 9·039	+ 0·102	− 0·07	Stone
89	41 Eridani υ^4 ...	+ 2·2634	+ 0·0031	− 0·001	− 9·008	+ 0·299	− 0·01	590
90	43 Eridani υ^5 ...	+ 2·2466	+ 0·0033	+ 0·005	− 8·522	+ 0·300	− 0·03	Stone
91	74 Tauri ε	+ 3·4884	+ 0·0120	+ 0·007	− 8·362	+ 0·466	+ 0·03	609
92	87 Tauri α	+ 3·4317	+ 0·0105	+ 0·004	− 7·767	+ 0·464	+ 0·18	630
93	48 Eridani ν	+ 2·9944	+ 0·0058	− 0·002	− 7·659	+ 0·406	− 0·01	637
94	52 Eridani υ^7 ...	+ 2·3344	+ 0·0033	− 0·005	− 7·613	+ 0·318	− 0·01	645
95	α Doradûs	+ 1·2842	+ 0·0099	+ 0·011	− 7·566	+ 0·176	+ 0·04	Stone
96	53 Eridani	+ 2·7503	+ 0·0042	− 0·008	− 7·469	+ 0·375	+ 0·16	647
97	54 Eridani	+ 2·6209	+ 0·0037	0·000	− 7·265	+ 0·359	+ 0·09	653
98	3 Aurigæ ι	+ 3·8981	+ 0·0144	+ 0·001	− 6·115	+ 0·544	+ 0·00	677
99	2 Leporis ε	+ 2·5362	+ 0·0033	+ 0·000	− 5·169	+ 0·359	+ 0·07	713
100	67 Eridani β... ...	+ 2·9534	+ 0·0045	− 0·007	− 5·038	+ 0·419	+ 0·07	715
101	69 Eridani λ	+ 2·8689	+ 0·0041	− 0·000	− 4·914	+ 0·408	− 0·00	720
102	μ Doradus, Var. 1 ...	+ 0·6311	+ 0·0136	...	− 4·690	+ 0·091	...	...
103	19 Orionis β	+ 2·8810	+ 0·0040	− 0·001	− 4·458	+ 0·412	− 0·01	736
104	... ...	+ 0·5961	+ 0·0131	...	− 4·264	+ 0·087	...	...
105	20 Orionis τ	+ 2·9122	+ 0·0040	− 0·002	− 4·201	+ 0·417	+ 0·00	742

84.—Proper motions from *Greenwich Catalogue* of 1872.

Mean Positions of Stars for 1877, *January* 1*st*.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension. h.	m.	s.	Mean Polar Distance. °	′	″	Observations.	Fraction of Year.
106	112 Tauri β	1·9	...	5	18	31·08	61	29	55·0	6	0·07
107	24 Orionis γ	1.9	...	5	18	32·14	83	45	45·0	2	0·01
108	R. P. L. 40	6·0	...	5	22	46·95	4	52	17·9	8	0·20
109	9 Leporis β	3·0	...	5	22	58·42	110	51	32·6	3	0·01
110	34 Orionis δ, Var. 1 ...	2·4	...	5	25	43·39	90	23	29·3	3	0·10
111	ϵ Columbæ	4·0	4	5	26	50·52	125	33	42·7	4	0·02
112	11 Leporis α	2·7	...	5	27	18·37	107	54	42·8	2	0·07
113	44 Orionis ι—1st	3·0	...	5	29	24·82	95	59	31·8	4	0·03
114	46 Orionis ϵ	1·8	...	5	29	58·31	91	16	56·6	3	0·08
115	β Doradûs	4·0	5	5	32	33·29	152	34	15·8	5	0·06
116	48 Orionis σ—1st ...	3·7	...	5	32	34·25	92	40	22·9	4	0·04
117	50 Orionis ζ	1·9	...	5	34	33·01	92	0	34·2	5	0·04
118	13 Leporis γ	3·8	...	5	39	19·96	112	29	23·9	5	0·04
119	53 Orionis κ	2·2	...	5	41	55·27	99	42	53·4	4	0·03
120	β Columbæ	2·9	...	5	46	37·31	125	48	57·2	3	0·02
121	58 Orionis α (*Betelgeux*) ...	Var.	...	5	48	30·78	82	37	2·4	4	0·08
122	34 Aurigæ β	2·1	...	5	50	30·11	45	4	3·3	4	0·04
123	16 Leporis η	3·7	...	5	50	48·04	104	11	30·3	5	0·06
124	γ Columbæ	4·1	5	5	53	10·27	125	17	51·5	5	0·04
125	R. P. L. 43	6·6	...	5	57	48·27	3	14	14·8	4	0·22
126	67 Orionis ν	4·4	...	6	0	32·94	75	13	7·0	6	0·08
127	13 Geminorum μ	3·2	...	6	15	31·17	67	25	31·8	2	0·10
128	1 Canis Majoris ζ ...	3·0	...	6	15	35·42	120	0	36·9	5	0·07
129	2 Canis Majoris β ...	2·0	...	6	17	16·77	107	53	45·8	5	0·07
130	3 Canis Majoris	4·1	5	6	17	36·87	123	22	31·2	5	0·06
131	24 Geminorum γ ...	2·0	...	6	30	36·31	73	29	52·0	9	0·10
132	ν Argûs	3·1	5	6	33	59·75	133	5	22·0	5	0·06
133	Lalande 12863	7·0	1	6	35	22·80	83	32	20·5	3	0·21
134	51 Cephei (*Hev.*)	5·0	...	6	42	16·01	2	46	3·7	5	0·40
135	13 Canis Majoris κ ...	3·9	...	6	45	14·64	122	22	4·6	5	0·07
136	τ Argûs	4·0	5	6	46	53·01	140	28	8·1	5	0·07
137	16 Canis Majoris o^1 ...	4·1	5	6	49	1·73	114	1	53·8	5	0·08
138	21 Canis Majoris ϵ ...	1·5	...	6	53	47·48	118	48	21·4	4	0·12
139	22 Canis Majoris	3·5	5	6	56	49·11	117	45	36·7	5	0·08
140	Taylor 2813	8·4	5	6	57	20·34	94	5	16·1	5	0·07

108.—Groombridge 944.

125.—Groombridge 1004.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	"	"	"	
106	112 Tauri β	+ 3·7864	+ 0·0082	+ 0·001	− 3·610	+ 0·545	+ 0·18	756
107	24 Orionis γ... ...	+ 3·2159	+ 0·0048	− 0·002	− 3·609	+ 0·463	+ 0·02	761
108	R. P. L. 40	+ 18·5511	+ 0·6252	...	− 3·243	+ 2·671	...	...
109	9 Leporis β	+ 2·5694	+ 0·0030	− 0·002	− 3·226	+ 0·371	+ 0·08	781
110	34 Orionis δ, Var. 1...	+ 3·0632	+ 0·0038	− 0·001	− 2·988	+ 0·443	+ 0·01	787
111	ϵ Columbæ	+ 2·1265	+ 0·0030	+ 0·002	− 2·892	+ 0·308	+ 0·07	Stone
112	11 Leporis α... ...	+ 2·6445	+ 0·0029	− 0·001	− 2·851	+ 0·383	− 0·01	796
113	44 Orionis ι—1st ...	+ 2·9332	+ 0·0034	− 0·001	− 2·669	+ 0·425	− 0·01	806
114	46 Orionis ϵ	+ 3·0426	+ 0·0035	− 0·002	− 2·620	+ 0·441	− 0·01	809
115	β Doradûs	+ 0·5145	+ 0·0091	− 0·003	− 2·396	+ 0·075	− 0·05	Stone
116	48 Orionis σ—1st ...	+ 3·0102	+ 0·0033	− 0·002	− 2·400	+ 0·352	− 0·01	814
117	50 Orionis ζ... ...	+ 3·0256	+ 0·0033	− 0·001	− 2·222	+ 0·439	− 0·01	819
118	13 Leporis γ	+ 2·5210	+ 0·0026	− 0·023	− 1·806	+ 0·367	+ 0·37	837
119	53 Orionis κ	+ 2·8440	+ 0·0027	− 0·002	− 1·580	+ 0·414	− 0·00	844
120	β Columbæ	+ 2·1092	+ 0·0026	+ 0·002	− 1·170	+ 0·308	− 0·39	Stone
121	58 Orionis α	+ 3·2453	+ 0·0027	+ 0·001	− 1·005	+ 0·473	− 0·02	860
122	34 Aurigæ β	+ 4·4048	+ 0·0043	− 0·007	− 0·832	+ 0·642	+ 0·01	859
123	16 Leporis η	+ 2·7345	+ 0·0023	− 0·004	− 0·805	+ 0·398	− 0·15	866
124	γ Columbæ	+ 2·1261	+ 0·0024	− 0·005	− 0·598	+ 0·310	+ 0·01	Stone
125	R. P. L. 43	+ 26·7064	+ 0·0749	...	− 0·192	+ 3·895	...	...
126	67 Orionis ν	+ 3·4250	+ 0·0017	− 0·000	+ 0·048	+ 0·500	+ 0·01	887
127	13 Geminorum μ ...	+ 3·6268	− 0·0003	+ 0·004	+ 1·357	+ 0·527	+ 0·10	929
128	1 Canis Majoris ζ ...	+ 2·3018	+ 0·0019	+ 0·000	+ 1·363	+ 0·334	− 0·01	933
129	2 Canis Majoris β ...	+ 2·6417	+ 0·0016	− 0·002	+ 1·511	+ 0·383	− 0·00	936
130	3 Canis Majoris ...	+ 2·1941	+ 0·0020	− 0·005	+ 1·542	+ 0·318	+ 0·08	939
131	24 Geminorum γ ...	+ 3·4648	− 0·0015	+ 0·002	+ 2·670	+ 0·500	+ 0·04	969
132	ν Argûs	+ 1·8353	+ 0·0014	− 0·004	+ 2·964	+ 0·264	+ 0·01	Stone
133	Lalande 12863 ...	+ 3·2226	− 0·0007	...	+ 3·083	+ 0·463	..	...
134	51 Cephei	+ 30·2553	− 2·1200	− 0·040	+ 3·678	+ 4·336	+ 0·05	Gr.
135	13 Canis Majoris κ ...	+ 2·2413	+ 0·0015	− 0·003	+ 3·933	+ 0·319	− 0·05	1008
136	τ Argûs	+ 1·4860	− 0·0008	...	+ 4·074	+ 0·210	...	...
137	16 Canis Majoris o^1...	+ 2·4897	+ 0·0013	− 0·003	+ 4·257	+ 0·353	− 0·01	1014
138	21 Canis Majoris ϵ ...	+ 2·3572	+ 0·0013	− 0·001	+ 4·664	+ 0·332	− 0·02	1023
139	22 Canis Majoris ...	+ 2·3900	+ 0·0013	− 0·002	+ 4·921	+ 0·336	+ 0·01	1027
140	Taylor 2813	+ 2·9796	− 0·0007	...	+ 4·965	+ 0·419	...	...

134.—Proper motions from *Greenwich Catalogue* of 1880.

Mean Positions of Stars for 1877, *January* 1*st.*

Number	Star.	Magnitude.	Estimations.	Mean Right Ascension. h.	m.	s.	Mean Polar Distance. °	′	″	Observations.	Fraction of Year.
141	24 Canis Majoris o^2 ...	3·0	...	6	57	53·23	113	39	16·8	5	0·09
142	25 Canis Majoris δ ...	1·8	...	7	3	23·32	116	11	57·8	5	0·07
143	π Argûs	3·1	5	7	12	47·79	126	52	39·3	5	0·07
144	31 Canis Majoris η ...	2·4	...	7	19	13·65	119	3	51·1	5	0·12
145	3 Canis Minoris β ...	3·1	...	7	20	28·70	81	27	48·1	5	0·07
146	σ Argûs	4·1	5	7	25	19·65	133	3	12·8	5	0·08
147	66 Gemin. α^2 (*Castor*) ...	2·0	...	7	26	45·01	57	50	36·5	2	0·14
148	10 Can. Min. α (*Procyon*)..	0·5	...	7	32	51·73	84	27	39·3	11	0·15
149	S. Geminorum, Var. 3 ...	10·5	4	7	35	20·82	66	14	2·7	4	0·07
150	78 Geminor. β (*Pollux*) ...	1·1	...	7	37	47·24	61	40	43·3	7	0·16
151	7 Argûs ξ	3·4	...	7	44	7·23	114	33	7·7	5	0·08
152	R. P. L. 49	6·7	...	7	47	14·01	5	35	36·2	3	0·12
153	Taylor 3318	4·2	5	7	49	41·13	137	47	0·1	5	0·07
154	χ Argûs	4·1	5	7	53	38·96	142	39	10·1	5	0·09
155	6 Cancri	5·0	...	7	55	57·68	61	51	44·6	3	0·21
156	ζ Argûs	2·5	5	7	59	15·68	129	39	24·5	5	0·09
157	15 Argûs	2·9	...	8	2	18·39	113	57	3·5	7	0·17
158	γ Argûs—2nd	2·1	5	8	5	44·42	136	58	30·3	5	0·08
159	ϵ Argûs	2·3	5	8	19	59·28	149	6	52·4	5	0·09
160	33 Cancri η	5·5	...	8	25	35·65	69	8	32·3	5	0·16
161	... ...	9·9	3	8	36	28·12	81	30	27·8	3	0·23
162	o Argûs	4·2	5	8	36	46·10	142	29	9·8	5	0·12
163	... ...	9·5	1	8	37	24·63	81	36	52·3	1	0·21
164	11 Hydræ ϵ	3·6	...	8	40	15·66	83	7	52·7	4	0·21
165	δ Argûs	3·1	5	8	41	18·62	144	15	29·7	5	0·14
166	R. P. L. 60	7·0	...	8	49	21·37	5	19	48·5	5	0·56
167	W. B. E. VIII. 1302 ...	8·5	1	8	51	27·03	98	56	43·9	1	0·28
168	b^1 Carinæ	4·8	5	8	53	57·75	148	45	19·5	5	0·12
169	b^2 Carinæ	4·6	5	8	56	23·00	148	36	49·4	5	0·14
170	λ Argûs	3·4	5	9	3	28·41	132	56	13·3	5	0·10
171	Taylor 4028	8·2	1	9	6	34·04	132	46	6·2	1	0·13
172	β Argûs	1·5	4	9	11	50·72	159	12	41·8	5	0·13
173	83 Cancri	6·6	...	9	12	6·85	71	46	28·6	11	0·18
174	κ Argûs	3·3	5	9	18	18·43	144	29	9·6	5	0·14
175	30 Hydræ α, Var. 2 ...	Var.	...	9	21	32·56	98	7	34·8	10	0·25

152.—Groombridge 1359.
161—163.—Comparison stars for Melete in 1868.
166.—Carrington 1286.
167.—Observed for map of T Hydræ.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	″	″	″	
141	24 Canis Majoris o^3 ...	+ 2·5052	+ 0·0011	− 0·002	+ 5·012	+ 0·352	− 0·02	1029
142	25 Canis Majoris δ ...	+ 2·4394	+ 0·0012	− 0·002	+ 5·476	+ 0·340	− 0·01	1042
143	π Argûs	+ 2·1194	+ 0·0011	− 0·004	+ 6·263	+ 0·291	+ 0·02	Stone
144	31 Canis Majoris η ...	+ 2·3732	+ 0·0011	− 0·002	+ 6·796	+ 0·323	+ 0·01	1081
145	3 Canis Minoris β ...	+ 3·2607	− 0·0041	− 0·004	+ 6·898	+ 0·444	+ 0·03	1079
146	σ Argûs	+ 1·9087	+ 0·0005	+ 0·005	+ 7·295	+ 0·256	− 0·09	Stone
147	66 Geminorum a^2 ...	+ 3·8532	− 0·0133	− 0·015	+ 7·411	+ 0·519	+ 0·08	1087
148	10 Canis Minoris α ...	+ 3·1914	− 0·0041	− 0·047	+ 7·905	+ 0·425	+ 1·03	1106
149	S Geminorum ...	+ 3·6108	− 0·0102	...	+ 8·105	+ 0·480	...	...
150	78 Geminorum β ...	+ 3·7281	− 0·0128	− 0·048	+ 8·300	+ 0·491	+ 0·05	1112
151	7 Argûs ξ	+ 2·5234	+ 0·0008	− 0·001	+ 8·300	+ 0·327	− 0·02	1132
152	R. P. L. 49	+ 15·2565	− 1·2372	...	+ 9·044	+ 1·982	...	...
153	Taylor 3318	+ 1·7642	− 0·0006	− 0·002	+ 9·236	+ 0·224	− 0·07	Stone
154	χ Argûs	+ 1·5312	− 0·0029	+ 0·001	+ 9·542	+ 0·192	+ 0·02	Stone
155	6 Cancri	+ 3·6976	− 0·0148	− 0·003	+ 9·719	+ 0·468	+ 0·04	1149
156	ζ Argûs	+ 2·1106	+ 0·0013	− 0·004	+ 9·971	+ 0·263	− 0·03	Stone
157	15 Argûs ι	+ 2·5609	+ 0·0009	− 0·008	+ 10·201	+ 0·318	− 0·06	1170
158	γ Argûs—2nd ...	+ 1·8500	+ 0·0001	+ 0·002	+ 10·459	+ 0·226	+ 0·04	Stone
159	ε Argûs	+ 1·2413	− 0·0089	− 0·005	+ 11·502	+ 0·143	− 0·03	Stone
160	33 Cancri η	+ 3·4822	− 0·0129	− 0·004	+ 11·900	+ 0·404	+ 0·05	1207
161	... ...	+ 3·2271	− 0·0077	...	+ 12·652	+ 0·360	...	...
162	o Argûs	+ 1·7225	− 0·0009	+ 0·001	+ 12·673	+ 0·190	+ 0·02	Stone
163	... ...	+ 3·2246	− 0·0076	...	+ 12·716	+ 0·359	...	...
164	11 Hydræ	+ 3·1955	− 0·0071	− 0·014	+ 12·908	+ 0·351	+ 0·02	1243
165	δ Argûs	+ 1·6560	− 0·0018	0·000	+ 12·978	+ 0·178	+ 0·10	Stone
166	R. P. L. 60	+ 13·6647	− 1·7118	...	+ 13·507	+ 1·467	...	...
167	W. B. E. VIII. 1302...	+ 2·9180	− 0·0016	...	+ 13·642	+ 0·306	...	...
168	b^1 Carinæ	+ 1·4736	− 0·0052	− 0·002	+ 13·802	+ 0·150	− 0·04	Stone
169	b^2 Carinæ	+ 1·4984	− 0·0048	− 0·020	+ 13·955	+ 0·151	− 0·24	Stone
170	λ Argûs	+ 2·2060	+ 0·0045	− 0·006	+ 14·394	+ 0·218	0·00	Stone
171	Taylor 4028	+ 2·2233	+ 0·0048	...	+ 14·581	+ 0·217	...	...
172	β Argûs	+ 0·7140	− 0·0348	− 0·032	+ 14·894	+ 0·064	− 0·09	Stone
173	83 Cancri	+ 3·3666	− 0·0134	+ 0·009	+ 14·909	+ 0·323	+ 0·14	1309
174	κ Argûs	+ 1·8575	+ 0·0027	− 0·007	+ 15·266	+ 0·169	− 0·01	Stone
175	30 Hydræ α	+ 2·9505	− 0·0013	− 0·002	+ 15·449	+ 0·268	− 0·05	1330

Mean Positions of Stars for 1877, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
176	ψ Argûs	4·1	5	9	25	51·39	129	55	44·7	5	0·14
177	W. B. E. IX. 708	8·8	5	9	33	15·77	86	14	56·0	5	0·28
178	... ...	10·0	5	9	37	3·72	79	51	50·0	5	0·29
179	... ...	10·0	5	9	37	47·89	79	46	17·0	5	0·29
180	17 Leonis ϵ	3·1	...	9	38	52·02	65	39	38·4	7	0·25
181	... ...	8·2	5	9	41	11·50	79	21	19·9	5	0·30
182	ν Argûs	3·3	5	9	44	1·75	154	30	7·5	5	0·14
183	24 Leonis μ	4·1	...	9	45	45·90	63	24	53·0	5	0·16
184	R. P. L. 70	5·0	...	9	48	37·84	5	29	26·7	4	0·51
185	φ Argûs	4·4	5	9	52	32·78	143	58	58·2	5	0·15
186	29 Leonis π	5·0	...	9	53	42·76	81	21	59·2	10	0·26
187	32 Leonis α (*Regulus*) ...	1·4	...	10	1	49·17	77	25	56·3	7	0·28
188	q Velorum	4·5	5	10	9	34·60	131	30	47·8	5	0·15
189	ω Argûs	4·1	5	10	10	48·85	159	25	41·3	5	0·18
190	R. P. L. 72	6·0	...	10	11	29·70	5	7	31·8	9	0·59
191	41 Leonis γ^1	2·5	...	10	13	11·32	69	32	11·8	6	0·28
192	34 Ursæ Majoris μ ...	3·1	...	10	14	59·60	47	52	55·6	5	0·20
193	42 Hydræ μ	4·1	...	10	20	8·46	106	12	32·1	5	0·16
194	47 Leonis ρ	4·0	...	10	26	20·02	80	3	40·2	7	0·28
195	θ Argûs	3·0	5	10	38	34·17	153	45	1·5	5	0·24
196	μ Argûs	3·1	4	10	41	28·97	138	46	14·1	5	0·19
197	53 Leonis l	5·3	...	10	42	47·45	78	48	15·8	7	0·29
198	ν Hydræ	3·3	...	10	43	33·46	105	32	58·1	5	0·23
199	... ...	10·5	5	10	43	50·76	81	48	21·4	5	0·23
200	Taylor 4915	8·5	1	10	47	6·97	135	33	51·1	1	0·21
201	48 Ursæ Majoris β ...	2·6	...	10	54	24·22	32	57	31·5	5	0·21
202	63 Leonis χ	4·7	...	10	58	40·29	81	59	58·8	9	0·30
203	11 Crateris β	4·4	...	11	5	36·52	112	9	15·7	5	0·22
204	68 Leonis δ	2·8	...	11	7	33·92	68	48	9·3	7	0·31
205	70 Leonis θ	3·5	...	11	7	46·94	73	53	54·9	5	0·23
206	12 Crateris δ	3·9	...	11	13	11·49	104	6	46·4	5	0·30
207	π Centauri...	4·0	5	11	15	23·98	143	48	59·4	5	0·23
208	15 Crateris γ	4·2	...	11	18	44·08	107	0	29·6	5	0·24
209	19 Hydræ ξ	3·8	...	11	26	57·32	121	10	37·0	5	0·23
210	21 Crateris θ	4·7	...	11	30	26·50	99	7	17·6	5	0·23

177.—Comparison star for Sappho in 1877.
178—179—181.—Comparison stars for Camilla in 1877.
184.—Carrington 1451.
190.—Groombridge 1620.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
176	ψ Argûs ...	+ 2·3752	+ 0·0065	− 0·027	+ 15·687	+ 0·209	− 0·07	Stone
177	W. B. E. IX. 708 ...	+ 3·1246	− 0·0060	...	+ 16·083	+ 0·265	...	...
178	... ...	+ 3·2118	− 0·0091	...	+ 16·279	+ 0·267	...	...
179	... ...	+ 3·2125	− 0·0092	...	+ 16·316	+ 0·265	...	...
180	17 Leonis ε ...	+ 3·4215	− 0·0180	− 0·004	+ 16·371	+ 0·282	+ 0·01	1368
181	... ...	+ 2·2153	− 0·0093	...	+ 16·487	+ 0·260	...	...
182	υ Argûs ...	+ 1·5049	− 0·0045	0·000	+ 16·627	+ 0·116	+ 0·01	Stone
183	24 Leonis μ ...	+ 3·4421	− 0·0198	− 0·019	+ 16·711	+ 0·271	+ 0·05	1384
184	R. P. L. 70 ...	+ 10·6148	− 1·5506	...	+ 16·849	+ 0·833	...	...
185	φ Argûs ...	+ 2·1014	+ 0·0093	− 0·007	+ 17·033	+ 0·155	+ 0·01	Stone
186	29 Leonis π ...	+ 3·1785	− 0·0080	− 0·004	+ 17·086	+ 0·236	+ 0·01	1398
187	32 Leonis α ...	+ 3·2192	− 0·0102	− 0·018	+ 17·447	+ 0·225	− 0·02	1406
188	q Velorum ...	+ 2·5238	+ 0·0118	− 0·017	+ 17·771	+ 0·332	− 0·05	Stone
189	ω Argûs ...	+ 1·4377	− 0·0072	− 0·026	+ 17·821	+ 0·088	+ 0·01	Stone
190	R. P. L. 72 ...	+ 9·8682	− 1·6141	− 0·096	+ 17·848	+ 0·648	− 0·04	1399
191	41 Leonis γ' ...	+ 3·2964	− 0·0148	+ 0·021	+ 17·915	+ 0·208	+ 0·14	1432
192	34 Ursæ Majoris μ ...	+ 3·6069	− 0·0361	− 0·008	+ 17·986	+ 0·225	− 0·03	1434
193	42 Hydræ μ ...	+ 2·9082	+ 0·0040	− 0·010	+ 18·181	+ 0·171	+ 0·06	1451
194	47 Leonis ρ ...	+ 3·1653	− 0·0080	− 0·001	+ 18·403	+ 0·176	− 0·01	1467
195	θ Argûs ...	+ 2·1291	+ 0·0199	0·000	+ 18·802	+ 0·100	+ 0·02	Stone
196	μ Argûs ...	+ 2·5597	+ 1·0194	+ 0·002	+ 18·888	+ 0·117	+ 0·08	Stone
197	53 Leonis l ...	+ 3·1597	− 0·0080	− 0·002	+ 18·927	+ 0·145	+ 0·02	1500
198	ν Hydræ ...	+ 2·9504	+ 0·0052	+ 0·005	+ 18·949	+ 0·133	− 0·22	1504
199	... ...	+ 3·1350	− 0·0063	...	+ 18·958	+ 0·141	...	...
200	Taylor 4915 ...	+ 2·6460	+ 0·0190	...	+ 19·048	+ 0·113	...	...
201	48 Ursæ Majoris β ...	+ 3·6543	− 0·0629	+ 0·009	+ 19·239	+ 0·142	− 0·05	1523
202	63 Leonis χ ...	+ 3·1219	− 0·0056	− 0·026	+ 19·340	+ 0·113	+ 0·02	1535
203	11 Crateris β ...	+ 2·9442	+ 0·0098	− 0·002	+ 19·492	+ 0·093	+ 0·09	1545
204	68 Leonis δ ...	+ 3·1898	− 0·0132	+ 0·010	+ 19·532	+ 0·098	+ 0·12	1546
205	70 Leonis θ ...	+ 3·1594	− 0·0098	− 0·006	+ 19·537	+ 0·096	+ 0·06	1548
206	12 Crateris δ ...	+ 3·0040	+ 0·0064	− 0·011	+ 19·638	+ 0·081	− 0·21	1557
207	π Centauri ...	+ 2·7188	+ 0·0305	− 0·001	+ 19·675	+ 0·069	+ 0·02	Stone
208	15 Crateris γ ...	+ 2·9990	+ 0·0082	− 0·009	+ 19·730	+ 0·070	− 0·03	1564
209	19 Hydræ ξ ...	+ 2·9560	+ 0·0167	− 0·017	+ 19·846	+ 0·053	+ 0·03	1580
210	21 Crateris θ ...	+ 3·0446	+ 0·0049	− 0·006	+ 19·888	+ 0·048	− 0·03	1585

Mean Positions of Stars for 1877, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
211	91 Leonis υ	4·5	...	11	30	39·06	90	8	41·4	5	0·32
212	27 Crateris ζ	4·9	...	11	38	31·40	107	39	58·8	5	0·24
213	... ...	8·4	1	11	38	45·97	149	43	8·1	1	0·40
214	... ...	8·9	4	11	38	51·08	148	40	12·8	4	0·39
215	94 Leonis β (*Denebola*) ...	2·2	...	11	42	47·09	74	44	25·7	4	0·33
216	28 Hydræ β	4·2	...	11	46	42·010	123	12	25·1	5	0·24
217	X Virginis, Var. 10 ...	10·6	10	11	55	34·06	80	14	29·7	10	0·26
218	R. P. L. 89	6·3	...	11	58	33·12 4·04	3	43	50·9	5	0·68
219	δ Centauri	3·0	5	12	1	59·385	140	2	12·8	5	0·26
220	1 Corvi α	4·3	...	12	2	4·024	114	2	32·2	5	0·29
221	Taylor 5574	7·5	3	12	3	22·802	141	5	58·0	3	0·39
222	2 Corvi ϵ	3·1	...	12	3	47·99	111	56	7·2	6	0·37
223	ρ Centauri	4·1	5	12	5	13·647	141	41	1·3	5	0·29
224	δ Crucis	3·2	5	12	8	37·426	148	3	51·0	5	0·29
225	4 Corvi γ	2·8	...	12	9	28·934	106	51	30·7	5	0·29
226	15 Virginis η	4·0	...	12	13	36·76	89	58	58·5	10	0·38
227	ϵ Crucis	4·0	5	12	14	43·48·50	149	43	14·8	5	0·27
228	7 Corvi δ	3·1	...	12	23	30·01 03	105	49	48·5	5	0·29
229	γ Crucis	2·1	5	12	24	20·77·93	146	25	27·1	5	0·31
230	γ Muscæ	4·2	5	12	25	8·14·26	161	27	15·8	5	0·30
231	9 Corvi β	2·8	...	12	27	55·63	112	42	58·5	8	0·39
232	α Muscæ	4·1	5	12	29	51·60·66	158	27	29·2	5	0·31
233	... ...	9·5	1	12	32	31·743	84	34	48·7	1	0·42
234	γ Centauri	3·1	5	12	34	44·127	138	17	0·6	5	0·29
235	β Muscæ	4·0	5	12	38	44·808	157	26	5·0	5	0·30
236	β Crucis	2·0	5	12	40	32·116	149	0	57·0	5	0·30
237	... ...	10·9	3	12	44	10·46	80	44	50·7	3	0·42
238	R. P. L. 98	6·6	...	12	48	9·65	5	54	48·5	1	0·94
239	R. P. L. 99	5·6	...	12	48	14·96·57	5	55	4·6	8	0·50
240	77 Ursæ Majoris ϵ (*Alioth*)	1·8	...	12	48	36·541	33	22	17·9	5	0·30
241	12 Canum Venaticorum α.	3·1	...	12	50	16·26	51	0	59·4	4	0·39
242	δ Muscæ	4·0	5	12	53	49·68·84	160	53	9·0	5	0·33
243	47 Virg. ϵ (*Vindemiatrix*).	3·0	...	12	56	3·11	78	22	42·6	5	0·31
244	51 Virginis θ	4·4	...	13	3	34·89	94	52	54·5	3	0·40
245	46 Hydræ γ	3·4	...	13	12	14·139	112	31	18·6	5	0·32

218.—Groombridge 1850.
237.—Comparison star for Isis in 1867.
239.—Groombridge 1940.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
211	91 Leonis υ	+ 3·0718	+ 0·0003	− 0·002	+ 19·890	+ 0·049	− 0·05	1586
212	27 Crateris ζ... ...	+ 3·0324	+ 0·0099	+ 0·001	+ 19·966	+ 0·032	+ 0·01	1598
213	... ...	+ 2·2861	+ 0·0444	...	+ 19·969	+ 0·030	...	...
214	... ...	+ 2·8699	+ 0·0430	...	+ 19·969	+ 0·030	...	...
215	94 Leonis β	+ 3·0997	− 0·0074	− 0·036	+ 19·998	+ 0·025	+ 0·10	1605
316	28 Hydræ β	+ 3·0214	+ 0·0200	− 0·005	+ 20·021	+ 0·016	− 0·01	1607
217	X Virginis	+ 3·0766	− 0·0035	...	+ 20·051	+ 0·000	...	...
218	R. P. L. 89	+ 3·2017	− 0·4950	...	+ 20·054	− 0·006	...	...
219	δ Centauri	+ 3·0861	+ 0·0380	0·000	+ 20·054	− 0·013	+ 0·01	Stone
220	1 Corvi α	+ 3·0776	+ 0·0153	+ 0·005	+ 20·054	− 0·013	+ 0·03	1624
221	Taylor 5574	+ 3·0967	+ 0·0395	...	+ 20·052	− 0·015	...	...
222	2 Corvi ϵ	+ 3·0812	+ 0·0142	− 0·006	+ 20·052	− 0·016	− 0·02	1626
223	ρ Centauri	+ 3·1108	+ 0·0410	...	+ 20·049	− 0·019	...	...
224	δ Crucis	+ 3·1531	+ 0·0526	0·000	+ 20·040	− 0·026	+ 0·05	Stone
225	4 Corvi γ	+ 3·0890	+ 0·0116	− 0·012	+ 20·037	− 0·028	− 0·03	1638
226	15 Virginis η ...	+ 3·0722	+ 0·0027	− 0·006	+ 20·018	− 0·035	+ 0·02	1647
227	ϵ Crucis	+ 3·2192	+ 0·0586	...	+ 20·013	− 0·039	...	...
228	7 Corvi δ	+ 3·1110	+ 0·0118	− 0·014	+ 19·949	− 0·055	+ 0·15	1675
229	γ Crucis	+ 3·2859	+ 0·0542	0·000	+ 19·941	− 0·060	+ 0·30	Stone
230	γ Muscæ	+ 3·5084	+ 0·1167	...	+ 19·934	− 0·065	...	...
231	9 Corvi β	+ 3·1402	+ 0·0164	− 0·003	+ 19·906	− 0·064	+ 0·05	1685
232	α Muscæ	+ 3·5122	+ 0·0996	...	+ 19·885	− 0·075	...	...
233	... ...	+ 3·0544	+ 0·0009	...	+ 19·852	− 0·071	...	...
234	γ Centauri	+ 3·2986	+ 0·0418	...	+ 19·825	− 0·082	...	...
235	β Muscæ	+ 3·6135	+ 0·0997	− 0·014	+ 19·769	− 0·097	+ 0·04	Stone
236	β Crucis	+ 3·4639	+ 0·0654	− 0·009	+ 19·742	− 0·097	+ 0·03	Stone
237	... ...	+ 3·0306	− 0·0003	...	+ 19·683	− 0·092	...	...
238	R. P. L. 98	+ 0·3797	+ 0·2182	− 0·017	+ 19·613	− 0·020	− 0·02	1730
239	R. P. L. 99	+ 0·3769	+ 0·2174	− 0·020	+ 19·612	− 0·019	− 0·02	1731
240	77 Ursæ Majoris ϵ ...	+ 2·6449	− 0·0273	+ 0·012	+ 19·605	− 0·089	+ 0·02	1722
241	12 Canum Venat. α ...	+ 2·8368	− 0·0152	− 0·022	+ 19·574	− 0·098	− 0·07	1725
242	δ Muscæ	+ 3·9699	+ 0·1372	+ 0·042	+ 19·504	− 0·143	0·00	Stone
243	47 Virginis ϵ... ...	+ 3·0057	− 0·0007	− 0·019	+ 19·457	− 0·114	− 0·03	1735
244	51 Virginis θ ...	+ 3·1036	+ 0·0078	− 0·004	+ 19·287	− 0·132	+ 0·04	1747
245	46 Hydræ γ	+ 3·2441	+ 0·0187	+ 0·002	+ 19·066	− 0·155	+ 0·03	1764

Mean Positions of Stars for 1877, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension. h.	m.	s.	Mean Polar Distance. °	′	″	Observations.	Fraction of Year.
246	ι Centauri	3·3	5	13	13	41·00	126	3	45·1	5	0·33
247	67 Virginis α (*Spica*) ...	1·2	...	13	18	42·82	100	31	6·7	4	0·38
248	R. P. L. 103	7·0	...	13	19	40·95	4	36	10·1	3	0·71
249	79 Virginis ζ	3·5	...	13	28	25·54	89	57	57·1	4	0·38
250	ε Centauri...	3·1	5	13	32	5·64	142	50	23·2	5	0·32
251	ν Centauri	3·8	5	13	42	7·96	131	4	24·7	5	0·37
252	μ Centauri	3·7	5	13	42	12·70	131	51	36·8	5	0·35
253	ζ Centauri...	3·1	5	13	47	52·53	136	40	54·6	5	0·39
254	8 Bootis η	2·9	...	13	48	49·68	70	59	6·5	5	0·41
255	φ Centauri...	4·7	4	13	50	42·96	131	29	55·9	5	0·37
256	Stone 7666	8·5	1	13	51	25·75	123	47	45·6	1	0·36
257	93 Virginis τ	4·3	...	13	55	23·18	87	51	34·1	6	0·41
258	5 Centauri θ	1·7	...	13	59	26·88	125	45	50·1	5	0·36
259	R. P. L. 108	7·8	...	14	2	15·34	3	39	10·1	1	0·42
260	16 Bootis α (*Arcturus*) ...	0·0	...	14	10	3·12	70	10	35·7	5	0·37
261	W. B. E. XIV. 192 ...	7·8	3	14	12	34·12	103	50	19·9	3	0·41
262	25 Bootis ρ	3·6	...	14	26	31·76	59	5	16·3	4	0·38
263	R. Camelopardi, Var. 1 ...	10·0	7	14	27	0·12	5	36	42·4	7	0·03
264	η Centauri...	3·3	5	14	27	42·10	131	36	59·4	5	0·37
265	α Circini	4·2	5	14	32	35·24	154	26	18·0	5	0·37
266	36 Bootis ε (*Mirac*) ...	2·6	...	14	39	36·96	62	24	22·7	2	0·43
267	9 Libræ α^2	3·0	...	14	44	4·58	105	31	45·4	3	0·45
268	β Lupi	3·2	5	14	50	28·92	132	38	0·5	5	0·40
269	κ Centauri	3·1	5	14	51	9·04	131	36	31·9	5	0·42
270	42 Bootis β	3·6	...	14	57	18·76	49	7	21·5	5	0·40
271	43 Bootis ψ	4·5	...	14	59	10·49	62	34	18·4	3	0·45
272	ζ Lupi	4·0	...	15	3	27·56	141	37	45·3	5	0·40
273	R. P. L. 111	7·0	...	15	4	14·74	5	34	24·8	2	0·51
274	γ Trianguli Australis ...	3·2	5	15	7	26·71	158	13	22·4	5	0·42
275	27 Libræ β	2·7	...	15	10	23·32	98	55	39·8	2	0·44
276	U Coronæ, Var. 4 ...	8·6	10	15	13	10·69	57	54	8·5	10	0·37
277	δ Lupi	4·1	5	15	13	17·97	130	12	5·7	5	0·43
278	ε Lupi	4·5	5	15	14	19·79	134	14	42·0	5	0·46
279	S Libræ, Var. 5	9·1	3	15	14	20·35	109	56	35·4	3	0·52
280	R. P. L. 114	6·9	...	15	17	34·97	2	17	49·0	1	0·90

248.—Groombridge 2007.
259.—Groombridge 2099.
273.—Groombridge 2213.
280.—Groombridge 2283.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
246	ι Centauri	+ 3·3898	+ 0·0305	...	+ 19·027	− 0·164	...	...
247	67 Virginis α... ...	+ 3·1558	+ 0·0116	− 0·004	+ 18·883	− 0·163	+ 0·02	1774
248	R. P. L. 103	− 2·5861	+ 0·9398	...	+ 18·855	+ 0·121	...	...
249	79 Virginis ζ... ...	+ 3·0719	+ 0·0064	− 0·021	+ 18·580	− 0·176	− 0·06	1789
250	ε Centauri	+ 3·7621	+ 0·0588	− 0·018	+ 18·459	− 0·223	+ 0·02	Stone
251	ν Centauri	+ 3·5744	+ 0·0379	...	+ 18·096	− 0·233	...	...
252	μ Centauri	+ 3·5889	+ 0·0390	+ 0·001	+ 18·093	− 0·234	− 0·02	Stone
253	ζ Centauri	+ 3·7151	+ 0·0469	− 0·012	+ 17·874	− 0·254	+ 0·05	Stone
254	8 Bootis η	+ 2·8616	− 0·0006	− 0·005	+ 17·835	− 0·199	+ 0·34	1821
255	φ Centauri	+ 3·6220	+ 0·0388	...	+ 17·756	− 0·254	...	...
256	Stone 7666	+ 3·4904	+ 0·0295	...	+ 17·731	− 0·244	...	...
257	93 Virginis τ ...	+ 3·0481	+ 0·0064	− 0·001	+ 17·566	− 0·222	+ 0·03	1829
258	5 Centauri θ	+ 3·5517	+ 0·0318	− 0·043	+ 17·392	+ 0·265	− 0·56	Stone
259	R. P. L. 108	− 7·5776	+ 2·4030	...	+ 17·268	+ 0·555	...	..
260	16 Bootis α	+ 2·8131	+ 0·0004	− 0·080	+ 16·910	− 0·227	+ 1·98	1847
261	W. B. E. XIV. 192 ...	+ 3·2524	+ 0·0146	...	+ 16·791	− 0·266	...	...
262	25 Bootis ρ	+ 2·5946	− 0·0015	− 0·009	+ 16·093	− 0·233	− 0·13	1869
263	R. Camelopardi ...	− 5·0692	+ 1·0592	...	+ 16·069	+ 0·436	...	...
264	η Centauri	+ 3·7857	+ 0·0389	− 0·009	+ 16·031	− 0·339	− 0·01	Stone
265	α Circini	+ 4·7987	+ 0·1116	...	+ 15·771	− 0·439	...	...
266	36 Bootis ε	+ 2·6240	− 0·0001	− 0·004	+ 15·384	− 0·252	− 0·00	1890
267	9 Libræ α^2	+ 3·3160	+ 0·0154	− 0·009	+ 15·131	− 0·324	+ 0·07	1894
268	β Lupi	+ 3·9057	+ 0·0392	− 0·014	+ 14·757	− 0·392	+ 0·03	Stone
269	κ Centauri	+ 3·8788	+ 0·0378	...	+ 14·717	− 0·390	...	...
270	42 Bootis β	+ 2·2636	+ 0·0000	− 0·005	+ 14·346	− 0·237	+ 0·04	1918
271	43 Bootis ψ	+ 2·5834	+ 0·0010	− 0·015	+ 14·232	− 0·271	+ 0·01	1922
272	ζ Lupi	+ 4·2841	+ 0·0549	...	+ 13·965	− 0·454	...	...
273	R. P. L. 111	− 6·7930	+ 1·1646	...	+ 13·916	+ 0·708	...	...
274	γ Trianguli Australis.	+ 5·5140	+ 0·1397	− 0·018	+ 13·712	− 0·593	+ 0·03	Stone
275	26 Libræ β	+ 3·2273	+ 0·0117	− 0·008	+ 13·523	− 0·353	+ 0·02	1934
276	U Coronæ	+ 2·4461	+ 0·0013	...	+ 13·342	− 0·272	...	...
277	δ Lupi	+ 3·9162	+ 0·0340	+ 0·001	+ 13·334	− 0·433	− 0·03	Stone
278	ε Lupi	+ 4·0487	+ 0·0395	...	+ 13·267	− 0·449	...	...
279	S Libræ	+ 3·4360	+ 0·0170	...	+ 13·270	− 0·382	...	...
280	R. P. L. 114	− 22·2337	+ 7·5198	...	+ 13·052	+ 2·456	...	...

Mean Positions of Stars for 1877, *January* 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension. h.	m.	s.	Mean Polar Distance. °	′	″	Observations.	Fraction of Year.
281	13 Ursæ Minoris γ ...	3·2	...	15	20	56·39	17	43	40·5	5	0·42
282	12 Draconis ι	3·4	...	15	22	12·08	30	36	9·5	5	0·45
283	γ Lupi	3·2	4	15	26	56·83	130	45	5·3	5	0·43
284	37 Libræ	4·9	...	15	27	27·53	99	38	27·9	5	0·42
285	13 Serpentis δ—2nd ...	5·3	...	15	28	55·58	79	2	52·4	5	0·45
286	5 Cor. Bor. α (*Alpheta*) ...	2·4	...	15	29	28·84	62	52	12·3	7	0·49
287	39 Libræ	3·9	...	15	29	33·56	117	43	32·7	5	0·44
288	24 Serpentis α	2·7	...	15	38	12·62	83	11	9·0	10	0·48
289	28 Serpentis β	3·8	...	15	40	30·64	74	11	31·4	5	0·42
290	5 Lupi χ	4·0	...	15	43	8·66	123	15	3·5	5	0·44
291	32 Serpentis μ	3·5	...	15	43	12·08	93	3	8·3	5	0·44
292	β Trianguli Australis ...	3·3	5	15	44	19·13	153	2	56·0	5	0·49
293	37 Serpentis ε	3·7	...	15	44	41·05	85	9	0·2	5	0·50
294	45 Libræ λ	5·0	...	15	46	11·93	109	47	50·5	3	0·48
295	R. P. L. 115	7·0	...	15	46	24·75	4	46	19·4	3	0·03
296	5 Scorpii ρ...	4·0	...	15	49	17·49	118	51	11·1	5	0·47
297	41 Serpentis γ	4·0	...	15	50	46·29	73	56	10·1	5	0·42
298	6 Scorpii π	3·1	...	15	51	24·58	115	45	28·7	5	0·47
299	8 Scorpii β^1	3·0	...	15	58	17·18	109	28	0·3	16	0·49
300	13 Draconis θ	4·2	...	15	59	35·23	31	6	19·2	5	0·41
301	R. P. L. 116	7·0	...	16	2	1·99	4	20	52·1	5	0·66
302	1 Ophiuchi δ	2·8	...	16	7	53·97	93	22	33·9	15	0·49
303	2 Ophiuchi ε	3·4	...	16	11	48·79	94	23	28·1	5	0·41
304	20 Herculis γ	3·8	...	16	16	29·82	70	33	26·0	5	0·42
305	21 Scorpii α (*Antares*) ...	1·1	...	16	21	52·05	116	9	24·7	11	0·53
306	α Normæ	4·1	5	16	23	20·75	124	26	3·5	5	0·46
307	27 Herculis β	2·8	...	16	24	56·02	68	14	28·5	5	0·48
308	S Ophiuchi, Var. 3 ...	10·9	9	16	27	10·47	106	54	1·9	9	0·43
309	40 Herculis ζ	3·1	...	16	36	39·02	58	10	24·7	11	0·53
310	44 Herculis η	3·7	...	16	38	40·72	50	50	33·7	5	0·48
311	η Aræ	4·6	5	16	39	10·48	148	49	9·1	5	0·50
312	26 Scorpii ε	2·2	...	16	42	11·94	124	4	3·8	5	0·57
313	μ^1 Scorpii...	3·5	2	16	43	32·44	127	50	2·8	2	0·54
314	μ^2 Scorpii...	4·2	5	16	44	0·33	127	48	20·2	5	0·50
315	ζ^1 Scorpii...	4·6	5	16	45	19·14	132	9	17·2	5	0·53

295.—Carrington 2380.

301.—Carrington 2423.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
281	13 Ursæ Minoris γ ...	− 0·1426	+ 0·0750	+ 0·004	+ 12·828	+ 0·010	− 0·02	1962
282	12 Draconis ι ...	+ 1·3267	+ 0·0133	− 0·002	+ 12·743	− 0·155	− 0·02	1957
283	γ Lupi	+ 3·9767	+ 0·0331	− 0·005	+ 12·420	− 0·460	+ 0·02	Stone
284	37 Libræ	+ 3·2508	+ 0·0116	+ 0 018	+ 12·384	− 0·378	+ 0·24	1960
285	13 Serpentis δ—2nd...	+ 2·8677	+ 0·0052	− 0·006	+ 12·283	− 0·336	− 0·02	1969
286	5 Coronæ Borealis α...	+ 2·5297	+ 0·0023	+ 0·009	+ 12·246	− 0·297	+ 0·09	1973
287	39 Libræ	+ 3·6288	+ 0·0210	− 0·004	+ 12·239	− 0·424	− 0·00	1966
288	24 Serpentis α ...	+ 2·9421	+ 0·0062	+ 0·008	+ 11·631	− 0·354	− 0·06	1990
289	28 Serpentis β ...	+ 2·7617	+ 0·0043	+ 0·003	+ 11·466	− 0·336	+ 0·04	1996
290	5 Lupi χ	+ 3·7971	+ 0·0238	− 0·002	+ 11·276	− 0·463	− 0·01	1998
291	32 Serpentis μ ...	+ 3·1312	+ 0·0089	− 0·008	+ 11·272	− 0·383	+ 0·01	2001
292	β Trianguli Australis	+ 5·2542	+ 0·0864	− 0·027	+ 11·191	− 0·640	+ 0·43	Stone
293	37 Serpentis ϵ ...	+ 2·9780	+ 0·0066	+ 0·007	+ 11·165	− 0·365	− 0·06	2005
294	45 Libræ λ	+ 3·4738	+ 0·0152	− 0·003	+ 11·054	− 0·428	+ 0·01	2007
295	R. P. L. 115 ...	− 10·2987	+ 1·5309	...	+ 11·038	+ 1·240	...	...
296	5 Scorpii ρ	+ 3·6922	+ 0·0200	− 0·003	+ 10·827	− 0·458	+ 0·02	2017
297	41 Serpentis γ ...	+ 2·7468	+ 0·0043	+ 0·019	+ 10·718	− 0·344	+ 1·29	2023
298	6 Scorpii π	+ 3·6184	+ 0·0179	− 0·003	+ 10·671	− 0·452	+ 0·03	2020
299	8 Scorpii β^1	+ 3·4797	+ 0·0142	− 0·003	+ 10·156	− 0·441	+ 0·03	2034
300	13 Draconis θ ...	+ 1·1552	+ 0·0145	...	+ 10·057	− 0·150	− 0·33	...
301	R. P. L. 116 ...	− 12·2337	+ 1·7482	...	+ 9·875	+ 1·549	...	...
302	1 Ophiuchi δ... ...	+ 3·1419	+ 0·0081	− 0·005	+ 9·423	− 0·408	+ 0·14	2065
303	2 Ophiuchi ϵ... ...	+ 3·1630	+ 0·0083	+ 0·004	+ 9·119	− 0·415	− 0·03	2073
304	20 Herculis γ ...	+ 2·6477	+ 0·0038	− 0·005	+ 8·753	− 0·351	− 0·05	2084
305	21 Scorpii α	+ 3·0696	+ 0·0150	− 0·002	+ 8·327	− 0·491	+ 0·03	2091
306	α Normæ	+ 3·9085	+ 0·0193	...	+ 8·209	− 0·524	...	...
307	27 Herculis β ...	+ 2·5838	+ 0·0037	− 0·009	+ 8·082	− 0·348	+ 0·02	2100
308	S Ophiuchi, Var. 3 ...	+ 3·4456	+ 0·0109	...	+ 7·902	− 0·465	...	...
309	40 Herculis ζ ...	+ 2·2968	+ 0·0033	− 0·036	+ 7·134	− 0·316	− 0·41	2127
310	44 Herculis η ...	+ 2·0513	+ 0·0037	+ 0·003	+ 6·968	− 0·284	+ 0·08	2133
311	η Aræ...	+ 5·1454	+ 0·0453	0·000	+ 6·927	− 0·707	+ 0·02	Stone
312	26 Scorpii ϵ	+ 3·9247	+ 0·0165	− 0·050	+ 6·678	− 0·543	+ 0·27	2132
313	μ^1 Scorpii	+ 4·0533	+ 0·0180	− 0·007	+ 6·567	− 0·562	0·00	Stone
314	μ^2 Scorpii	+ 4·0529	+ 0·0179	...	+ 6·529	− 0·562	...	...
315	ζ^1 Scorpii	+ 4·2188	+ 0·0205	+ 0·003	+ 6·420	− 0·586	+ 0·04	Stone

Mean Positions of Stars for 1877, *January* 1*st*.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
316	ζ^2 Scorpii	3·5	5	16	45	55·7984	132	8	52·8	5	0·53
317	ζ Aræ	3·7	5	16	48	26·92	145	47	35·9	5	0·50
318	ϵ^1 Aræ	4·2	5	16	49	47·09	142	58	6·3	5	0·50
319	27 Ophiuchi κ	3·4	...	16	51	50·73	80	25	55·3	7	0·54
320	58 Herculis ϵ	4·0	...	16	55	34·87	58	53	28·7	5	0·47
321	22 Ursæ Minoris ϵ ...	4·5	...	16	58	38·57	7	45	47·4	4	0·10
322	η Scorpii	3·7	5	17	3	20·73	133	4	26·6	5	0·48
323	U Ophiuchi, Var. 5 ...	9·5	10	17	3	40·747	106	11	52·3	10	0·43
324	22 Draconis ζ	3·3	...	17	8	26·12	24	8	1·1	5	0·49
325	64 Herculis α^1, Var. 1 ...	Var.	...	17	9	2·35	75	28	3·8	7	0·55
326	ζ Apodis	4·3	4	17	9	9·269	157	38	19·1	5	0·57
327	67 Herculis π	3·4	...	17	10	45·843	53	3	3·5	5	0·53
328	68 Herculis u, Var. 7 ...	5·8	10	17	12	47·21	56	46	~~3·4~~	10	0·43
329	40 Ophiuchi ξ	4·5	...	17	13	38·002	110	58	42·7	5	0·53
330	42 Ophiuchi θ	3·4	...	17	14	27·43	114	52	27·3	2	0·56
331	γ Aræ	3·1	3	17	15	2·47	146	15	32·6	3	0·59
332	β Aræ	3·0	1	17	15	4·46	145	24	36·7	1	0·63
333	δ Aræ	4·0	5	17	19	59·86	150	34	39·5	5	0·50
334	α Aræ	3·2	5	17	22	19·95	139	46	33·8	5	0·47
335	34 Scorpii ν	2·8	...	17	22	23·96	127	11	43·3	5	0·50
336	35 Scorpii λ	1·7	...	17	25	15·28·30	127	0	42·7	5	0·54
337	θ Scorpii	3·1	5	17	28	28·75	132	55	1·6	5	0·48
338	55 Ophiuchi α	2·2	...	17	29	13·47	77	20	55·8	7	0·61
339	η Pavonis	4·6	5	17	33	39·57	154	39	42·4	5	0·48
340	Taylor 8199	9·5	1	17	36	41·05	65	21	50·8	1	0·47
341	69 Ophiuchi β	2·9	...	17	37	23·75	85	22	44·7	5	0·48
342	ι^1 Scorpii	3·7	5	17	38	58·90	130	4	35·8	5	0·52
343	3 Sagittarii, Var. 7 ...	4·6	8	17	39	49·08·10	117	46	54·3	10	0·51
344	Taylor 8229	4·0	5	17	41	28·97·9	127	0	6·0	5	0·55
345	86 Herculis μ	3·5	...	17	41	38·67	62	12	21·5	8	0·56
346	Lacaille 7494	7·0	3	17	48	13·28·34	122	27	7·2	3	0·61
347	Lacaille 7506	7·0	3	17	48	43·89	116	44	55·1	3	0·63
348	Lacaille 7502	7·0	2	17	48	46·503	122	40	2·6	3	0·62
349	64 Ophiuchi ν	3·5	...	17	52	15·29	99	45	22·7	5	0·47
350	θ Aræ	4·1	5	17	57	3·33	140	5	47·6	5	0·50

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
316	ζ^2 Scorpii	+ 4·2196	+ 0·0203	− 0·021	+ 6·369	− 0·587	+ 0·20	Stone
317	ζ Aræ...	+ 4·9439	+ 0·0348	− 0·013	+ 6·160	− 0·689	+ 0·08	Stone
318	ϵ^1 Aræ	+ 4·7619	+ 0·0300	− 0·008	+ 6·048	− 0·665	0·00	Stone
319	27 Ophiuchi κ ...	+ 2·8568	+ 0·0044	− 0·021	+ 5·876	− 0·402	− 0·02	2156
320	58 Herculis ϵ ...	+ 2·2971	+ 0·0032	− 0·005	+ 5·563	− 0·324	+ 0·03	2161
321	22 Ursæ Minoris ϵ ...	− 6·3854	+ 0·3082	+ 0·009	+ 5·306	+ 0·896	+ 0·00	2201
322	η Scorpii	+ 4·2842	+ 0·0167	− 0·003	+ 4·907	− 0·608	+ 0·26	Stone
323	U Ophiuchi, Var. 5 ...	+ 3·4489	+ 0·0074	...	+ 4·879	− 0·490	...	...
324	22 Draconis ζ ...	+ 0·1633	+ 0·0193	− 0·003	+ 4·474	− 0·025	− 0·02	2193
325	64 Herculis α^1 ...	+ 2·7343	+ 0·0035	− 0·002	+ 4·422	− 0·391	− 0·03	2183
326	ζ Apodis	+ 6·2424	+ 0·0522	...	+ 4·413	− 0·890	...	...
327	67 Herculis π ...	+ 2·0897	+ 0·0032	− 0·004	+ 4·275	− 0·300	− 0·01	2187
328	68 Herculis ω ...	+ 2·2148	+ 0·0031	− 0·004	+ 4·102	− 0·318	− 0·01	2194
329	40 Ophiuchi ξ ...	+ 3·5744	+ 0·0073	+ 0·017	+ 4·030	− 0·513	+ 0·20	2186
330	42 Ophiuchi θ ...	+ 3·6799	+ 0·0080	− 0·002	+ 3·959	− 0·528	+ 0·01	2189
331	γ Aræ...	+ 5·0354	+ 0·0235	− 0·004	+ 3·909	− 0·722	+ 0·01	Stone
332	β Aræ	+ 4·9738	+ 0·0225	+ 0·002	+ 3·906	− 0·713	+ 0·03	Stone
333	δ Aræ	+ 5·4068	+ 0·0263	− 0·009	+ 3·483	− 0·777	+ 0·09	Stone
334	α Aræ	+ 4·6316	+ 0·0149	− 0·005	+ 3·281	− 0·667	+ 0·10	Stone
335	34 Scorpii υ	+ 4·0732	+ 0·0097	− 0·004	+ 3·275	− 0·587	+ 0·03	2205
336	35 Scorpii λ	+ 4·0685	+ 0·0090	− 0·001	+ 3·029	− 0·588	+ 0·05	2210
337	θ Scorpii	+ 4·3036	+ 0·0100	+ 0·001	+ 2·750	− 0·623	+ 0·02	Stone
338	55 Ophiuchi α ...	+ 2·7749	+ 0·0030	+ 0·007	+ 2·685	− 0·402	+ 0·22	2218
339	η Pavonis	+ 5·8771	+ 0·0226	...	+ 2·300	− 0·853	...	...
340	Taylor 8199	+ 2·4623	+ 0·0027	...	+ 2·037	− 0·358	...	...
341	60 Ophiuchi β ...	+ 2·9648	+ 0·0030	− 0·004	+ 1·974	− 0·431	− 0·17	2229
342	ι^1 Scorpii	+ 4·1923	+ 0·0065	− 0·003	+ 1·837	− 0·610	− 0·03	Stone
343	3 Sagittarii, Var. 7 ...	+ 3·7738	+ 0·0048	...	+ 1·764	− 0·549	...	...
344	Taylor 8229	+ 4·0764	+ 0·0055	...	+ 1·618	− 0·594	...	...
345	86 Herculis μ ...	+ 2·3698	+ 0·0025	− 0·024	+ 1·604	− 0·346	+ 0·75	2237
346	Lacaille 7494... ...	+ 3·9213	+ 0·0037	...	+ 1·031	− 0·571	...	...
347	Lacaille 7506... ...	+ 3·7453	+ 0·0033	...	+ 0·986	− 0·546	...	...
348	Lacaille 7502 ...	+ 3·9285	+ 0·0036	...	+ 0·982	− 0·572	...	...
349	64 Ophiuchi ν ...	+ 3·3019	+ 0·0024	− 0·002	+ 0·678	− 0·481	+ 0·11	2250
350	θ Aræ	+ 4·6709	+ 0·0023	− 0·007	+ 0·258	− 0·681	+ 0·04	Stone

Mean Positions of Stars for 1877, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
351	10 Sagittarii γ^2	3·0	...	17	57	54·28	120	25	24·1	5	0·48
352	Radcliffe 3828	5·7	3	17	59	56·23	41	32	25·3	5	0·66
353	Taylor 8376	5·3	5	18	0	17·32	118	28	6·7	5	0·66
354	72 Ophiuchi	3·8	...	18	1	31·20	80	27	6·8	5	0·68
355	ϵ Telescopii	4·5	1	18	2	5·89	135	58	22·9	1	0·64
356	Lacaille 7577	5·0	2	18	3	59·69	153	5	4·7	2	0·64
357	13 Sagittarii μ^1	4·1	...	18	6	24·39	111	5	20·0	12	0·57
358	η Sagittarii	3·0	...	18	9	18·21	126	47	47·9	5	0·48
359	23 Ursæ Minoris δ ...	4·5	...	18	12	0·78	3	23	30·7	8	0·23
360	19 Sagittarii δ	2·8	...	18	13	7·14	119	52	41·7	5	0·49
361	58 Serpentis η	3·4	...	18	14	56·64	92	55	46·0	5	0·52
362	20 Sagittarii ϵ	2·1	...	18	16	0·18	124	26	25·4	5	0·55
363	α Telescopii	4·0	4	18	17	51·00	136	2	1·3	5	0·53
364	... ...	8·8	5	18	17	55·29	121	49	11·2	5	0·67
365	... ...	7·7	3	18	19	6·00	121	26	28·6	3	0·64
366	ζ Telescopii	4·8	5	18	19	21·32	139	8	4·4	5	0·63
367	ν Pavonis	5·5	2	18	19	53·07	152	21	11·2	2	0·68
368	δ^1 Telescopii	5·2	5	18	22	38·69	135	59	41·2	5	0·69
369	δ^2 Telescopii	5·5	5	18	22	56·09	135	50	20·9	5	0·69
370	ζ Pavonis	4·5	4	18	28	39·22	161	31	50·0	5	0·61
371	3 Lyræ α (*Vega*)	0·2	...	18	32	46·41	51	19	47·4	12	0·62
372	Taylor 8577	5·0	5	18	33	22·05	154	59	3·6	5	0·65
373	λ Coronæ Australis ...	5·9	4	18	35	20·56	128	26	22·5	5	0·66
374	θ Pavonis	5·3	4	18	36	31·90	155	12	5·3	4	0·67
375	27 Sagittarii ϕ	3·3	...	18	37	58·24	117	6	54·1	5	0·51
376	T Aquilæ, Var. 3	9·7	9	18	39	50·57	81	23	8·3	10	0·54
377	λ Pavonis	5·2	5	18	40	49·08	152	19	32·6	5	0·70
378	κ Telescopii	5·8	4	18	42	54·02	142	14	44·3	4	0·70
379	κ Pavonis	5·0	2	18	44	15·34	157	23	2·4	2	0·61
380	10 Lyræ β^1, Var. 1 ...	Var.	...	18	45	32·29	56	46	44·7	11	0·65
381	34 Sagittarii σ	2·3	...	18	47	38·24	116	26	50·0	5	0·49
382	ϵ Coronæ Aust., Var. 1 ...	5·5	3	18	50	25·46	127	15	57·1	5	0·65
383	13 Aquilæ ϵ	4·1	...	18	54	2·37	75	5	50·8	5	0·50
384	14 Lyræ γ	3·3	...	18	54	20·76	57	28	41·4	5	0·54
385	38 Sagittarii ζ	2·9	...	18	54	47·10	120	3	14·1	5	0·53

364—365.—Comparison stars for Diana in 1864.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
351	10 Sagittarii γ^2 ...	+ 3·8573	+ 0·0020	− 0·005	+ 0·183	− 0·563	+ 0·21	2266
352	Radcliffe 3828 ...	+ 1·5633	+ 0·0025	...	+ 0·006	− 0·228	...	...
353	Taylor 8376	+ 3·7972	+ 0·0016	...	− 0·025	− 0·554	...	...
354	72 Ophiuchi	+ 2·8473	+ 0·0019	− 0·006	− 0·132	− 0·415	− 0·09	2275
355	ϵ Telescopii	+ 4·4553	+ 0·0007	...	− 0·184	− 0·650	...	...
356	Lacaille 7577 ...	+ 5·7054	− 0·0021	...	− 0·350	− 0·832	...	...
357	13 Sagittarii μ^1 ...	+ 3·5876	+ 0·0009	− 0·001	− 0·560	− 0·523	− 0·00	2284
358	η Sagittarii	+ 4·0714	− 0·0005	− 0·016	− 0·814	− 0·593	+ 0·18	Stone
359	23 Ursæ Minoris δ ...	− 19·4531	− 0·3499	+ 0·026	− 1·051	+ 2·838	− 0·04	2395
360	19 Sagittarii δ ...	+ 3·8390	− 0·0006	+ 0·001	− 1·147	− 0·559	+ 0·03	2294
361	58 Serpentis η ...	+ 3·1405	+ 0·0010	− 0·040	− 1·307	− 0·456	+ 0·68	2298
362	20 Sagittarii ϵ ...	+ 3·9868	− 0·0016	− 0·004	− 1·400	− 0·579	+ 0·15	2297
363	α Telescopii	+ 4·4541	− 0·0043	− 0·014	− 1·560	− 0·647	+ 0·07	Stone
364	... ...	+ 3·8993	− 0·0017	...	− 1·566	− 0·566	...	...
365	... ...	+ 3·8868	− 0·0019	...	− 1·655	− 0·564	...	...
366	ζ Telescopii	+ 4·6120	− 0·0057	− 0·015	− 1·692	− 0·669	+ 0·23	Stone
367	ν Pavonis	+ 5·6148	− 0·0133	...	− 1·738	− 0·815	...	...
368	δ^1 Telescopii ...	+ 4·4497	− 0·0057	− 0·002	− 1·981	− 0·645	+ 0·00	Stone
369	δ^2 Telescopii ...	+ 4·4420	− 0·0057	− 0·003	− 2·003	− 0·642	+ 0·05	Stone
370	ζ Pavonis	+ 7·0437	− 0·0415	− 0·004	− 2·501	− 1·019	+ 0·13	Stone
371	3 Lyræ α	+ 2·0132	+ 0·0016	+ 0·017	− 2·858	− 0·290	− 0·30	2341
372	Taylor 8577	+ 5·9070	− 0·0275	...	− 2·909	− 0·856	...	...
373	λ Coronæ Australis...	+ 4·1208	− 0·0067	...	− 3·081	− 0·593	...	...
374	θ Pavonis	+ 5·9292	− 0·0305	− 0·007	− 3·183	− 0·853	+ 0·04	Stone
375	27 Sagittarii ϕ ...	+ 3·7474	− 0·0042	+ 0·001	− 3·307	− 0·538	+ 0·02	2344
376	T Aquilæ, Var. 3 ...	+ 2·8727	+ 0·0004	...	− 3·469	− 0·414	...	...
377	λ Pavonis	+ 5·5812	− 0·0280	− 0·008	− 3·553	− 0·800	+ 0·04	Stone
378	κ Telescopii	+ 4·7685	− 0·0162	...	− 3·732	− 0·680	...	...
379	κ Pavonis	+ 6·2218	− 0·0437	− 0·011	− 3·848	− 0·889	− 0·10	Stone
380	10 Lyræ β^1	+ 2·2139	+ 0·0015	− 0·001	− 3·958	− 0·315	− 0·02	2369
381	34 Sagittarii σ ...	+ 3·7229	− 0·0054	− 0·001	− 4·138	− 0·529	+ 0·07	2365
382	ϵ Coronæ Australis...	+ 4·0649	− 0·0094	...	− 4·377	− 0·577	...	...
383	13 Aquilæ ϵ	+ 2·7263	+ 0·0004	− 0·005	− 4·685	− 0·385	+ 0·08	2390
384	14 Lyræ γ	+ 2·2436	+ 0·0014	− 0·002	− 4·711	− 0·316	− 0·01	2392
385	38 Sagittarii ζ ...	+ 3·8237	− 0·0075	− 0·004	− 4·748	− 0·540	− 0·01	2384

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Mean Positions of Stars for 1877, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
386	R. P. L. 131	6·5	...	18	54	54·44	3	26	56·3	2	0·38
387	γ Coronæ Australis ...	5·0	5	18	58	6·02	127	14	15·5	5	0·65
388	40 Sagittarii τ	3·5	...	18	59	15·45	117	50	53·5	5	0·55
389	16 Aquilæ λ	3·6	...	18	59	43·17	95	3	55·0	5	0·65
390	17 Aquilæ ζ	3·1	...	18	59	45·36	76	19	4·9	5	0·65
391	δ Coronæ Australis ...	5·1	5	18	59	46·97	130	41	7·3	5	0·71
392	α Coronæ Australis ...	4·6	5	19	1	6·02	128	5	37·7	5	0·55
393	20 Aquilæ	5·3	...	19	6	0·43	98	8	35·0	5	0·65
394	25 Aquilæ ω	5·1	...	19	12	2·51	78	37	29·4	7	0·63
395	S Sagittarii, Var. 2 ...	10·3	2	19	12	14·19	109	14	46·8	2	0·43
396	57 Draconis δ	3·2	...	19	12	31·82	22	33	16·0	5	0·53
397	β^1 Sagittarii	3·5	5	19	13	47·39	134	41	16·3	5	0·57
398	1 Cygni κ	3·9	...	19	14	15·44	36	51	27·2	2	0·72
399	β^2 Sagittarii	4·3	5	19	14	19·79	135	1	44·8	5	0·66
400	46 Sagittarii υ	4·7	...	19	14	41·11	106	11	2·6	5	0·66
401	α Sagittarii	4·0	4	19	15	21·69	130	50	43·0	4	0·69
402	Taylor 8907—2nd ...	6·0	4	19	17	54·84	144	34	5·0	4	0·67
403	30 Aquilæ δ	3·5	...	19	19	17·72	87	7	44·1	6	0·67
404	μ Telescopii	4·8	4	19	20	35·39	145	21	34·5	5	0·70
405	6 Vulpeculæ α	4·7	...	19	23	35·37	65	34	59·3	5	0·66
406	6 Cygni β—1st	3·1	...	19	25	45·93	62	17	49·8	5	0·57
407	6 Cygni β—2nd	5·2	...	19	25	47·78	62	17	32·0	6	0·61
408	38 Aquilæ μ	4·7	...	19	28	4·66	82	52	49·6	5	0·64
409	52 Sagittarii h^3	4·6	...	19	29	13·23	115	9	11·6	3	0·65
410	39 Aquilæ κ	4·9	...	19	30	16·38	97	17	57·0	5	0·65
411	41 Aquilæ ι	4·3	...	19	30	21·31	91	33	26·5	5	0·70
412	Radcliffe 4400	10·0	5	19	33	38·43	40	3	5·5	5	0·66
413	12 Cygni φ	4·6	...	19	34	31·04	60	7	45·3	5	0·76
414	5 Sagittæ α	4·3	...	19	34	35·91	72	16	4·1	5	0·66
415	ν Telescopii	5·7	5	19	37	58·09	146	39	21·4	5	0·67
416	Lacaille 8195	5·5	3	19	39	14·24	155	54	12·3	3	0·76
417	50 Aquilæ γ	2·8	...	19	40	24·68	79	41	5·8	4	0·65
418	18 Cygni δ	3·0	...	19	41	7·58	45	10	6·5	5	0·59
419	... ...	8·1	5	19	41	49·88	123	3	59·7	5	0·70
420	7 Sagittæ δ	3·7	...	19	41	54·17	71	46	5·1	5	0·67

386.—Carrington 2882.

419.—Comparison star for Pandora in 1862.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
386	R. P. L. 131	− 18·4778	− 1·5229	...	− 4·756	+ 2·619	...	...
387	γ Coronæ Australis...	+ 4·0559	− 0·0112	+ 0·004	− 5·029	− 0·571	+ 0·29	Stone
388	40 Sagittarii τ ...	+ 3·7550	− 0·0074	− 0·007	− 5·128	− 0·527	+ 0·26	2397
389	16 Aquilæ λ	+ 3·1868	− 0·0021	− 0·004	− 5·167	− 0·447	+ 0·08	2401
390	17 Aquilæ ζ	+ 2·7578	+ 0·0003	− 0·003	− 5·170	− 0·387	+ 0·09	2405
391	δ Coronæ Australis ...	+ 4·1826	− 0·0132	+ 0·002	− 5·172	− 0·588	+ 0·07	Stone
392	α Coronæ Australis ...	+ 4·0832	− 0·0120	+ 0·007	− 5·283	− 0·573	+ 0·11	Stone
393	20 Aquilæ	+ 3·2556	− 0·0031	− 0·002	− 5·696	− 0·453	− 0·01	2415
394	25 Aquilæ ω	+ 2·8165	− 0·0003	− 0·001	− 6·201	− 0·388	− 0·03	2432
395	S Sagittarii	+ 3·5160	− 0·0064	...	− 6·217	− 0·485	...	...
396	57 Draconis δ ...	+ 0·0130	− 0·0225	+ 0·016	− 6·241	+ 0·001	− 0·08	2449
397	β^1 Sagittarrii ...	+ 4·3267	− 0·0195	− 0·003	− 6·346	+ 0·596	+ 0·02	Stone
398	1 Cygni κ	+ 1·3806	− 0·0026	+ 0·007	− 6·385	− 0·188	− 0·11	2447
399	β^2 Sagittarii ...	+ 4·3408	− 0·0198	...	− 6·391	+ 0·597	...	...
400	46 Sagittarii υ ...	+ 3·4399	− 0·0057	− 0·001	− 6·420	− 0·472	+ 0·01	2437
401	α Sagittarii	+ 4·1663	− 0·0168	− 0·011	− 6·476	− 0·572	+ 0·07	Stone
402	Taylor 8907—2nd ...	+ 4·8437	− 0·0330	...	− 6·687	− 0·663	...	...
403	30 Aquilæ δ	+ 3·0092	− 0·0018	+ 0·015	− 6·801	− 0·410	− 0·09	2451
404	μ Telescopii	+ 4·8891	− 0·0356	− 0·009	− 6·907	− 0·667	0·00	Stone
405	6 Vulpeculæ α ...	+ 2·5052	+ 0·0008	− 0·011	− 7·154	− 0·338	+ 0·10	2467
406	6 Cygni β—1st ...	+ 2·4188	{ +0·0011	− 0·002	− 7·330	{ − 0·325	+ 0·01	2473
407	6 Cygni β—2nd ...	+ 2·4187			− 7·334			
408	38 Aquilæ μ	+ 2·9175	− 0·0012	+ 0·013	− 7·519	− 0·392	+ 0·13	2479
409	52 Sagittarii h^2 ...	+ 3·6530	− 0·0102	+ 0·002	− 7·612	− 0·490	+ 0·01	2478
410	39 Aquilæ κ	+ 3·2304	− 0·0044	− 0·001	− 7·697	− 0·432	− 0·01	2482
411	41 Aquilæ ι	+ 3·1058	− 0·0030	− 0·001	− 7·703	− 0·415	+ 0·01	2484
412	Radcliffe 4400 ...	+ 1·6125	− 0·0015	...	− 7·961	− 0·212	...	...
413	12 Cygni φ	+ 2·3687	+ 0·0012	− 0·001	− 8·038	− 0·314	− 0·05	2497
414	5 Sagittæ α	+ 2·6806	+ 0·0001	0·000	− 8·045	− 0·355	+ 0·01	2495
415	ν Telescopii	+ 4·9214	− 0·0452	...	− 8·314	− 0·650	...	...
416	Lacaille 8195 ...	+ 5·7857	− 0·0817	...	− 8·414	− 0·762	...	...
417	50 Aquilæ γ	+ 2·8519	− 0·0011	− 0·001	− 8·507	− 0·373	− 0·01	2511
418	18 Cygni δ	+ 1·8705	+ 0·0001	+ 0·005	− 8·565	− 0·241	− 0·04	2520
419	... ...	+ 3·8582	− 0·0161	...	− 8·620	− 0·504	...	...
420	7 Sagittæ δ	+ 2·6745	+ 0·0002	− 0·001	− 8·625	− 0·347	− 0·03	2516

Mean Positions of Stars for 1877, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
421	Taylor 9099	6·0	5	19	42	48·99	145	16	54·0	5	0·71
422	Taylor 9125	7·9	5	19	44	9·44	56	52	9·7	5	0·59
423	53 Aquilæ α (*Altair*) ...	1·0	...	19	44	46·83	81	27	17·7	4	0·69
424	Lacaille 8224	5·5	2	19	45	57·02	159	29	1·0	2	0·76
425	ι Sagittarii	4·5	2	19	46	46·13	132	11	24·4	2	0·76
426	μ^1 Pavonis	5·5	3	19	48	23·41	157	16	15·2	3	0·76
427	60 Aquilæ β	4·0	...	19	49	16·23	83	53	57·3	3	0·64
428	59 Sagittarii *b*	4·7	...	19	49	23·65	117	29	39·8	5	0·66
429	μ^2 Pavonis	5·6	5	19	49	52·95	157	16	24·9	5	0·78
430	61 Sagittarii *g*	5·0	...	19	50	58·31	105	48	57·6	5	0·71
431	60 Sagittarii A	5·0	...	19	51	27·30	116	31	37·1	5	0·69
432	21 Cygni η...	4·0	...	19	51	41·52	55	14	33·4	5	0·59
433	12 Sagittæ γ	3·6	...	19	53	16·93	70	50	27·5	5	0·73
434	62 Sagittarii *c*	4·7	...	19	55	5·58	118	3	1·2	5	0·67
435	δ Pavonis	4·0	3	19	56	38·18	156	29	35·9	3	0·76
436	O. A. S. 20266	6·5	5	20	1	32·70	105	22	58·7	5	0·74
437	O. A. S. 20269	9·9	3	20	1	52·22	105	46	7·0	3	0·76
438	~~O. A. N. 20046~~ S. Sagittarii,	10·3	10	20	2	55·70	32	22	0·0	10	0·79
439	65 Aquilæ θ	3·4	...	20	4	57·50	91	11	5·7	5	0·58
440	Lacaille 8363—1st ...	9·1	4	20	5	2·74	147	20	27·6	4	0·65
441	Cordoba XX. 180... ...	8·8	1	20	5	15·08	147	12	18·8	1	0·71
442	6 Capricorni a^2	3·8	...	20	11	13·70	102	55	28·8	8	0·72
443	8 Capricorni ν	4·7	...	20	13	50·37	103	8	39·6	5	0·69
444	U Cygni, Var. 6	9·2	5	20	15	47·70	42	29	37·1	5	0·59
445	O. A. N. 20387—2nd ...	8·1	5	20	15	52·43	42	28	55·6	5	0·66
446	37 Cygni γ	2·3	...	20	17	49·00	50	8	8·3	5	0·73
447	10 Capricorni π	5·2	...	20	20	16·78	108	36	48·4	5	0·66
448	11 Capricorni ρ	5·0	...	20	21	50·60	108	13	7·8	7	0·73
449	ν Indi	5·6	5	20	25	27·49	134	55	52·8	5	0·65
450	R. P. L. 143	6·7	...	20	27	51·92	5	15	51·5	8	0·40
451	α Indi	3·0	4	20	28	54·34	137	43	7·4	5	0·64
452	β Pavonis	3·0	5	20	33	51·21	156	38	35·0	5	0·74
453	η Indi	5·6	5	20	35	0·18	142	21	30·7	5	0·64
454	50 Cygni α (*Deneb*) ...	1·5	...	20	37	14·31	45	9	30·7	12	0·70
455	σ Pavonis—2nd	4·6	5	20	37	37·68	159	13	24·8	5	0·73

436—437.—Comparison stars for Ariadne in 1877.

450.—Carrington 3128.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
421	Taylor 9099	+ 4·8107	− 0·0437	...	− 8·698	− 0·629	...	...
422	Taylor 9125	+ 2·2882	+ 0·0013	...	− 8·804	− 0·296	...	...
423	53 Aquilæ α	+ 2·8920	− 0·0014	+ 0·035	− 8·852	− 0·374	− 0·38	2524
424	Lacaille 8224 ...	+ 6·2699	− 0·1143	...	− 8·944	− 0·815	...	...
425	ι Sagittarii	+ 4·1549	− 0·0245	− 0·003	− 9·009	− 0·537	− 0·08	Stone
426	μ^1 Pavonis	+ 5·9135	− 0·0971	...	− 9·135	− 0·764	...	...
427	60 Aquilæ β	+ 2·9453	− 0·0020	+ 0·001	− 9·204	− 0·378	+ 0·47	2538
428	59 Sagittarii *b* ...	+ 3·6902	− 0·0137	− 0·002	− 9·212	− 0·474	+ 0·02	2533
429	μ^2 Pavonis	+ 5·9042	− 0·0981	...	− 9·251	− 0·761	...	...
430	61 Sagittarii *g* ...	+ 3·4074	− 0·0084	− 0·001	− 9·336	− 0·436	+ 0·08	2540
431	60 Sagittarii A ...	+ 3·6622	− 0·0134	0·000	− 9·372	− 0·468	− 0·03	2539
432	21 Cygni η	+ 2·2525	+ 0·0014	− 0·003	− 9·397	− 0·286	+ 0·03	2548
433	12 Sagittæ γ... ...	+ 2·6633	+ 0·0003	+ 0·003	− 9·514	− 0·338	− 0·04	2550
434	62 Sagittarii *c* ..	+ 3·6966	− 0·0146	+ 0·000	− 9·653	− 0·469	− 0·02	2549
435	δ Pavonis	+ 5·7565	− 0·0967	+ 0·190	− 9·772	− 0·730	+ 1·15	Stone
436	O. A. S. 20266 ...	+ 3·3895	− 0·0089	...	− 10·144	− 0·423	...	...
437	O. A. S. 20269 ...	+ 3·3976	− 0·0090	...	− 10·168	− 0·423	...	...
438	O. A. N. 20046 ...	+ 1·2584	− 0·0074	...	− 10·218	− 0·154	...	...
439	65 Aquilæ θ	+ 3·0959	− 0·0042	− 0·000	− 10·400	− 0·382	− 0·01	2576
440	Lacaille 8363—1st ...	+ 4·8563	− 0·0568	...	− 10·404	− 0·603	...	...
441	Cordoba XX. 180 ...	+ 4·8450	− 0·0563	...	− 10·422	− 0·602	...	...
442	6 Capricorni α^2 ...	+ 3·3301	− 0·0084	+ 0·002	− 10·866	− 0·403	− 0·02	2595
443	8 Capricorni ν ...	+ 3·3327	− 0·0087	− 0·002	− 11·057	− 0·401	+ 0·01	2608
444	U Cygni	+ 1·8615	+ 0·0002	...	− 11·199	− 0·220	...	...
445	O. A. N 20387—2nd...	+ 1·8617	+ 0·0002	...	− 11·205	− 0·220	...	...
446	37 Cygni γ	+ 2·1516	+ 0·0019	− 0·000	− 11·346	− 0·254	− 0·02	2624
447	10 Capricorni π ...	+ 3·4408	− 0·0116	− 0·001	− 11·522	− 0·406	− 0·01	2623
448	11 Capricorni ρ ...	+ 3·4307	− 0·0115	− 0·003	− 11·634	− 0·403	+ 0·01	2626
449	ν Indi	+ 4·1462	− 0·0348	...	− 11·891	− 0·482	...	...
450	R. P. L. 143	− 8·5212	− 1·2757	...	− 12·060	+ 0·998	...	...
451	α Indi	+ 4·2429	− 0·0398	0·000	− 12·133	− 0·488	− 0·08	Stone
452	β Pavonis	+ 5·4963	− 0·1163	− 0·009	− 12·473	− 0·623	− 0·00	Stone
453	η Indi	+ 4·4241	− 0·0506	...	− 12·553	− 0·499	...	...
454	50 Cygni α	+ 2·0435	+ 0·0021	− 0·000	− 12·705	− 0·226	− 0·00	2679
455	σ Pavonis—2nd ...	+ 5·7948	− 0·1443	...	− 12·733	− 0·649	...	...

Mean Positions of Stars for 1877, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension. h.	m.	s.	Mean Polar Distance. °	′	″	Observations.	Fraction of Year.
456	12 Delphini γ—1st ...	5·6	...	20	40	56·28	74	19	4·2	5	0·66
457	12 Delphini γ—2nd ...	4·6	...	20	40	57·06	74	19	3·4	5	0·71
458	53 Cygni ε	2·7	...	20	41	13·88	56	29	21·1	1	0·79
459	3 Aquarii	4·6	...	20	41	14·75	95	28	35·2	5	0·73
460	54 Cygni λ^1, Var. 5 ...	6·3	7	20	42	16·11	56	4	37·4	7	0·71
461	α Microscopii	4·5	5	20	42	16·69	124	13	59·0	5	0·74
462	ι Indi	5·5	2	20	42	35·84	142	3	52·4	2	0·75
463	β Indi	4·0	4	20	45	11·14	148	54	59·4	4	0·70
464	32 Vulpeculæ	5·1	...	20	49	19·07	62	24	33·5	9	0·75
465	ζ Microscopii	5·6	5	20	55	6·00	129	6	37·1	5	0·64
466	μ Indi	5·6	5	20	56	10·60	145	12	42·1	5	0·67
467	64 Cygni ζ...	3·5	...	21	7	42·06	60	16	36·6	16	0·76
468	29 Capricorni	5·5	...	21	8	56·15	105	40	53·4	5	0·64
469	θ Indi	5·5	5	21	11	5·03	143	57	47·8	5	0·72
470	θ^1 Microscopii	5·5	5	21	12	53·20	131	19	41·4	5	0·66
471	γ Pavonis	3·0	5	21	16	15·07	155	55	16·0	5	0·72
472	1 Pegasi	4·3	...	21	16	23·76	70	43	15·1	5	0·65
473	θ^2 Microscopii	6·0	5	21	16	33·78	131	31	57·7	5	0·72
474	γ Indi	5·2	5	21	17	28·03	145	11	24·9	5	0·75
475	34 Capricorni ζ	3·8	...	21	19	38·51	112	56	35·0	5	0·68
476	22 Aquarii β	3·1	...	21	25	4·89	96	6	40·7	16	0·77
477	39 Capricorni ε	4·5	...	21	30	11·38	110	0	58·3	5	0·65
478	... ...	9·0	1	21	30	19·27	133	59	2·9	1	0·79
479	41 Capricorni	5·2	...	21	35	0·21	113	49	4·9	5	0·71
480	43 Capricorni κ	4·7	...	21	35	47·42	109	25	33·3	5	0·73
481	V Cygni, Var. 7	10·4	10	21	36	53·04	47	43	10·9	10	0·81
482	... ...	9·3	5	21	37	17·39	47	44	21·9	5	0·77
483	9 Piscis Australis ι ...	4·2	...	21	37	36·90	123	35	9·3	5	0·78
484	8 Pegasi ε	2·4	...	21	38	8·68	80	41	15·9	2	0·74
485	o Indi	5·5	1	21	40	20·96	160	12	5·4	1	0·75
486	10 Piscis Australis θ ...	5·1	...	21	40	30·87	121	28	0·4	5	0·75
487	γ Gruis	3·2	5	21	46	28·42	127	56	33·2	5	0·70
488	16 Pegasi	5·0	...	21	47	27·92	64	39	10·7	6	0·78
489	π Indi	5·5	5	21	47	35·69	148	28	51·6	5	0·76
490	δ Indi	5·1	5	21	49	32·08	145	34	34·6	5	0·79

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
456	12 Delphini γ—1st ...	+ 2·7857	− 0·0000	− 0·003	− 12·953	− 0·304	+ 0·20	2686
457	12 Delphini γ—2nd...				− 12·955			
458	53 Cygni ϵ	+ 2·3972	+ 0·0030	+ 0·028	− 12·973	− 0·261	− 0·34	2689
459	3 Aquarii	+ 3·1700	− 0·0065	− 0·002	− 12·974	− 0·347	+ 0·03	2684
460	54 Cygni λ^1	+ 2·3892	+ 0·0030	− 0·001	− 13·042	− 0·259	− 0·02	2692
461	α Microscopii ...	+ 3·7633	− 0·0240	...	− 13·043	− 0·411	...	...
462	ι Indi	+ 4·3737	− 0·0512	− 0·002	− 13·063	− 0·478	+ 0·06	Stone
463	β Indi	+ 4·7384	− 0·0734	− 0·008	− 13·235	− 0·514	− 0·01	Stone
464	32 Vulpeculæ ...	+ 2·5558	+ 0·0026	− 0·002	− 13·504	− 0·270	+ 0·00	2709
465	ζ Microscopii ...	+ 3·8571	− 0·0303	− 0·008	− 13·874	− 0·400	+ 0·06	Stone
466	μ Indi...	+ 4·4556	− 0·0620	...	− 13·942	− 0·462	...	...
467	64 Cygni ζ	+ 2·5510	+ 0·0038	− 0·002	− 14·649	− 0·248	+ 0·07	2760
468	29 Capricorni ...	+ 3·3271	− 0·0119	+ 0·000	− 14·723	− 0·324	− 0·01	2759
469	θ Indi	+ 4·3073	− 0·0599	...	− 14·849	− 0·417	...	...
470	θ^1 Microscopii ...	+ 3·8556	− 0·0345	...	− 14·954	− 0·369	...	...
471	γ Pavonis	+ 5·0325	− 0·1203	+ 0·019	− 15·150	− 0·475	− 0·83	Stone
472	1 Pegasi	+ 2·7660	+ 0·0019	+ 0·006	− 15·158	− 0·257	− 0·08	2780
473	θ^2 Microscopii ...	+ 3·8469	− 0·0350	...	− 15·167	− 0·360	...	...
474	γ Indi	+ 4·3252	− 0·0642	− 0·005	− 15·219	− 0·404	− 0·04	Stone
475	34 Capricorni ζ ...	+ 3·4367	− 0·0167	− 0·001	− 15·342	− 0·316	− 0·01	2785
476	22 Aquarii β... ...	+ 3·1618	− 0·0071	− 0·001	− 15·645	− 0·282	+ 0·00	2797
477	39 Capricorni ϵ ...	+ 3·3684	− 0·0148	− 0·001	− 15·921	− 0·292	+ 0·00	2806
478	... ...	+ 3·8565	− 0·0394	...	− 15·927	− 0·337	...	...
479	41 Capricorni ...	+ 3·4211	− 0·0175	+ 0·006	− 16·173	− 0·288	+ 0·11	2819
480	43 Capricorni κ ...	+ 3·3497	− 0·0145	+ 0·007	− 16·214	− 0·281	+ 0·00	2821
481	V Cygni, Var. 7 ...	+ 2·3615	+ 0·0078	...	− 16·270	− 0·195	...	...
482	... ...	+ 2·3637	+ 0·0080	...	− 16·291	− 0·194	...	...
483	9 Piscis Australis ι ...	+ 3·5890	− 0·0260	− 0·003	− 16·307	− 0·298	+ 0·10	2825
484	8 Pegasi ϵ	+ 2·9451	− 0·0005	+ 0·001	− 16·334	− 0·242	− 0·01	2835
485	o Indi...	+ 5·1977	− 0·1671	...	− 16·445	− 0·427	...	...
486	10 Piscis Australis θ ..	+ 3·5400	− 0·0240	− 0·006	− 16·454	− 0·288	− 0·04	2842
487	γ Gruis	+ 3·6458	− 0·0310	+ 0·002	− 16·746	− 0·286	+ 0·02	Stone
488	16 Pegasi	+ 2·7261	+ 0·0052	− 0·001	− 16·793	− 0·210	+ 0·00	2864
489	π Indi...	+ 4·2629	− 0·0770	...	− 16·800	− 0·333	...	...
490	δ Indi...	+ 4·1238	− 0·0664	− 0·005	− 16·891	− 0·318	+ 0·01	Stone

Mean Positions of Stars for 1877, *January* 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension. h.	m.	s.	Mean Polar Distance. °	′	″	Observations.	Fraction of Year.
491	κ^1 Indi	5·1	5	21	49	47·22	149	35	51·3	5	0·76
492	12 Piscis Australis η ...	5·5	...	21	53	45·94	119	2	35·2	6	0·71
493	κ^2 Indi	5·5	5	21	57	11·85	150	13	48·5	5	0·80
494	λ Gruis	5·0	5	21	58	41·67	130	8	10·7	5	0·77
495	34 Aquarii α	3·2	...	21	59	27·85	90	54	59·9	8	0·78
496	22 Pegasi ν	4·8	...	21	59	28·66	85	32	30·8	5	0·75
497	α Tucanæ	2·4	5	22	10	3·60	150	52	19·5	5	0·72
498	43 Aquarii θ	4·3	...	22	10	20·47	98	23	41·1	13	0·79
499	δ^1 Gruis	4·2	5	22	21	54·72	134	7	24·8	5	0·74
500	δ^2 Gruis	5·0	5	22	22	23·98	134	22	40·0	5	0·79
501	R. P. L. 150	5·5	...	22	22	49·46	4	30	43·6	9	0·52
502	R. P. L. 151	6·9	...	22	23	16·44	4	23	52·2	6	0·53
503	17 Piscis Australis β ...	4·3	...	22	24	30·49	122	58	34·1	5	0·81
504	62 Aquarii η	4·2	...	22	29	2·07	90	45	3·6	15	0·82
505	18 Piscis Australis ϵ ...	4·1	...	22	33	50·98	117	41	5·0	5	0·72
506	β Gruis	3·0	5	22	35	18·75	137	31	37·8	5	0·78
507	42 Pegasi ζ	3·6	...	22	35	19·55	79	48	36·3	9	0·82
508	44 Pegasi η	3·1	...	22	37	14·05	60	25	19·4	5	0·75
509	ϵ Gruis	4·0	5	22	41	6·85	141	57	47·4	5	0·72
510	... ...	9·8	10	22	42	17·23	102	28	36·9	10	0·83
511	Lalande 44635	8·4	10	22	42	57·50	101	59	57·1	10	0·81
512	W. B. E. XXII. 918 ...	9·2	10	22	45	6·66	102	41	9·6	10	0·85
513	73 Aquarii λ	3·8	...	22	46	11·52	98	14	0·3	1	0·87
514	74 Aquarii...	6·8	5	22	47	0·30	102	16	11·4	5	0·80
515	75 Aquarii...	7·9	...	22	47	37·80	102	50	34·8	10	0·77
516	76 Aquarii δ	3·4	...	22	48	7·02	106	28	27·1	5	0·77
517	24 Pis. Aust. α (*Fomalhaut*)	1·3	...	22	50	51·07	120	16	26·9	1	0·91
518	W. B. E. XXII. 1129 ...	9·3	10	22	55	1·91	102	44	34·1	10	0·78
519	O. A. S. 22573	9·3	6	22	56	14·15	110	2	35·4	6	0·81
520	1 Andromedæ o	3·8	...	22	56	15·58	48	20	4·6	5	0·77
521	W. B. E. XXII. 1204 ...	8·3	10	22	58	2·95	102	50	29·4	10	0·75
522	54 Pegasi α (*Markab*) ...	2·6	...	22	58	38·04	75	27	23·4	11	0·89
523	Lalande 45213	8·2	10	23	0	57·92	102	28	14·7	10	0·77
524	O. A. S. 22620	9·3	6	23	1	30·91	109	52	14·2	6	0·81
525	Lalande 45504	8·0	10	23	8	55·92	102	14	4·1	10	0·74

501.—Groombridge 3820.
502.—Groombridge 3824.
510—511—512—514—515—518—521—523—525.—Comparison stars for Mars in 1877.
519—524.—Comparison stars for Irene in 1877.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
491	κ^1 Indi	+ 4·2983	− 0·0817	+ 0·009	− 16·904	− 0·331	− 0·09	Stone
492	12 Piscis Australis η	+ 3·4608	− 0·0218	− 0·001	− 17·088	− 0·257	− 0·02	2873
493	κ^2 Indi	+ 4·2655	− 0·0842	...	− 17·243	− 0·311	...	...
494	λ Gruis	+ 3·6414	− 0·0338	...	− 17·310	− 0·261	...	...
495	34 Aquarii α	+ 3·0830	− 0·0041	− 0·001	− 17·344	− 0·219	− 0·00	2890
496	22 Pegasi ν	+ 3·0200	− 0·0018	+ 0·005	− 17·344	− 0·214	− 0·11	2891
497	α Tucanæ	+ 4·1803	− 0·0858	− 0·007	− 17·789	− 0·274	+ 0·04	Stone
498	43 Aquarii θ... ...	+ 3·1630	− 0·0075	+ 0·006	− 17·802	− 0·205	+ 0·02	2929
499	δ^1 Gruis	+ 3·6104	− 0·0388	− 0·007	− 18·245	− 0·211	+ 0·01	Stone
500	δ^2 Gruis	+ 3·6128	− 0·0392	− 0·006	− 18·263	− 0·210	+ 0·07	Stone
501	R. P. L. 150	− 3·8976	− 1·2201	+ 0·052	− 18·278	+ 0·242	− 0·04	2993
502	R. P. L. 151	− 4·0491	− 1·2853	+ 0·025	− 18·295	+ 0·250	− 0·01	2997
503	17 Piscis Australis β	+ 3·4233	− 0·0249	+ 0·001	− 18·339	− 0·194	+ 0·04	2964
504	62 Aquarii η	+ 3·0790	− 0·0031	+ 0·006	− 18·495	− 0·166	+ 0·11	2979
505	18 Piscis Australis ϵ	+ 3·3297	− 0·0197	− 0·000	− 18·654	− 0·171	+ 0·01	2986
506	β Gruis	+ 3·5997	− 0·0436	+ 0·012	− 18·701	− 0·181	+ 0·04	Stone
507	42 Pegasi ζ	+ 2·9854	+ 0·0023	+ 0·004	− 18·701	− 0·149	+ 0·02	2992
508	44 Pegasi η	+ 2·8041	+ 0·0108	+ 0·000	− 18·761	− 0·137	+ 0·03	3003
509	ϵ Gruis	+ 3·6490	− 0·0519	+ 0·003	− 18·878	− 0·172	+ 0·11	Stone
510	... ...	+ 3·1706	− 0·0088	...	− 18·911	− 0·145	...	...
511	Lalande 44635 ...	+ 3·1659	− 0·0085	...	− 18·932	− 0·145	...	...
512	W. B. E. XXII. 918...	+ 3·1688	− 0·0089	...	− 18·993	− 0·141	...	...
513	73 Aquarii λ... ...	+ 3·1335	− 0·0063	− 0·002	− 19·023	− 0·137	− 0·04	3019
514	74 Aquarii	+ 3·1633	− 0·0085	+ 0·000	− 19·046	− 0·137	+ 0·01	3021
515	75 Aquarii	+ 3·1669	− 0·0088	+ 0·001	− 19·063	− 0·136	+ 0·04	3024
516	76 Aquarii δ	+ 3·1942	− 0·0111	− 0·005	− 19·077	− 0·136	+ 0·01	3025
517	24 Piscis Australis α	+ 3·3042	− 0·0210	+ 0·023	− 19·149	− 0·135	+ 0·16	3032
518	W. B. E. XXII. 1129..	+ 3·1568	− 0·0085	...	− 19·254	− 0·119	...	...
519	O. A. S. 22573 ...	+ 3·2062	− 0·0130	...	− 19·283	− 0·121	...	...
520	1 Andromedæ o ...	+ 2·7456	+ 0·0186	+ 0·001	− 19·285	− 0·102	0·00	3043
521	W. B. E. XXII. 1204	+ 3·1536	− 0·0083	...	− 19·326	− 0·115	...	...
522	54 Pegasi α	+ 2·9805	+ 0·0056	+ 0·003	− 19·339	− 0·107	+ 0·03	3050
523	Lalande 45213 ...	+ 3·1475	− 0·0086	...	− 19·392	− 0·109	...	...
524	O. A. S. 22620 ...	+ 3·1942	− 0·0127	...	− 19·405	− 0·110	...	...
525	Lalande 45504 ...	+ 3·1364	− 0·0074	...	− 19·559	− 0·093	...	...

Mean Positions of Stars for 1877, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
526	W. B. E. XXIII. 143 ...	9·2	10	23	9	21·01	101	42	49·6	10	0·77
527	γ Tucanæ	4·0	3	23	10	14·38	148	54	35·5	3	0·95
528	6 Piscium γ	3·8	...	23	10	47·27	87	23	22·1	1	0·87
529	Lalande 45582	8·1	10	23	11	14·77	102	23	4·4	10	0·83
530	W. B. E. XXIII. 193 ...	9·2	10	23	11	27·75	101	56	10·3	10	0·89
531	S Pegasi, Var. 5	10·1	10	23	14	19·09	81	45	11·5	10	0·81
532	Lalande 45708	8·2	9	23	14	28·52	101	12	19·8	10	0·82
533	Lalande 45777	8·2	10	23	16	37·58	101	26	51·8	10	0·83
534	Lalande 45885	9·0	10	23	20	22·19	101	42	31·2	10	0·79
535	8 Piscium κ	5·0	...	23	20	37·61	89	25	2·8	2	0·94
536	W. B. E. XXIII. 423 ...	9·5	8	23	22	29·65	100	46	41·0	8	0·87
537	Lalande 45965	7·8	10	23	22	38·91	99	56	34·3	10	0·74
538	W. B. E. XXIII. 453 ...	9·3	10	23	23	52·21	101	7	38·6	10	0·87
539	W. B. E. XXIII. 463 ...	9·3	10	23	24	29·12	100	50	1·8	10	0·84
540	Lalande 46123	9·3	10	23	26	42·86	100	2	47·8	10	0·78
541	R. P. L. 158	5·7	...	23	27	50·43 ~~49·26~~	3	22	19·8	1	0·30
542	17 Piscium ι	4·3	...	23	33	37·40	85	2	24·6	15	0·86
543	δ Sculptoris	4·6	...	23	42	30·97	118	48	38·0	8	0·89
544	28 Piscium ω	4·2	...	23	52	59·67	83	49	2·0	10	0·90
545	2 Ceti	4·6	...	23	57	26·36	108	1	15·2	2	0·72

526—529—530—532—533—534—536—537—538—539—540.—Comparison stars for Mars in 1877.
541.—Groombridge 4101.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
526	W. B. E. XXIII. 143..	+ 3·1331	− 0·0072	...	− 19·567	− 0·092	...	...
527	γ Tucanæ	+ 3·5498	− 0·0645	− 0·012	− 19·583	− 0·104	− 0·04	Stone
528	6 Piscium γ	+ 3·0592	+ 0·0005	+ 0·049	− 19·594	− 0·087	− 0·02	3082
529	Lalande 45582 ...	+ 3·1343	− 0·0074	...	− 19·604	− 0·089	...	...
530	W. B. E. XXIII. 193..	+ 3·1317	− 0·0072	...	− 19·606	− 0·088	...	...
531	S Pegasi, Var. 5 ...	+ 3·0339	+ 0·0035	...	− 19·658	− 0·080	...	...
532	Lalande 45708 ...	+ 3·1245	− 0·0066	...	− 19·661	− 0·082	...	...
533	Lalande 45777 ...	+ 3·1233	− 0·0066	...	− 19·697	− 0·078	...	...
534	Lalande 45885 ...	+ 3·1199	− 0·0066	...	− 19·755	− 0·069	...	...
535	8 Piscium κ	+ 3·0699	− 0·0000	+ 0·004	− 19·759	− 0·069	+ 0·10	3116
536	W. B. E. XXIII. 423..	+ 3·1137	− 0·0060	...	− 19·786	− 0·066	...	...
537	Lalande 45965 ...	+ 3·1103	− 0·0055	...	− 19·788	− 0·066	...	...
538	W. B. E. XXIII. 453..	+ 3·1135	− 0·0061	...	− 19·805	− 0·062	...	...
539	W. B. E. XXIII. 463..	+ 3·1117	− 0·0059	...	− 19·814	− 0·061	...	...
540	Lalande 46123 ...	+ 3·1065	− 0·0053	...	− 19·843	− 0·057	...	...
541	R. P. L. 158	− 0·1030	− 0·5342	+ 0·084	− 19·857	+ 0·011	− 0·00	3147
542	17 Piscium ι	+ 3·0589	+ 0·0030	+ 0·023	− 19·922	− 0·042	+ 0·44	3148
543	δ Sculptoris	+ 3·1283	− 0·0161	+ 0·009	− 19·996	− 0·026	+ 0·10	Stone
544	28 Piscium ω ...	+ 3·0678	+ 0·0047	+ 0·009	− 20·045	− 0·005	+ 0·11	3191
545	2 Ceti...	+ 3·0770	− 0·0080	− 0·000	− 20·053	+ 0·004	+ 0·01	3204

SEPARATE RESULTS

OF

OBSERVATIONS

OF THE FIXED STARS

MADE WITH THE

MADRAS MERIDIAN CIRCLE

IN THE YEAR

1878

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
1 21 *Andromedæ α, (Alpherat).*					
Nov. 9	...	0 2 4·99	...	61 34 59·8	M
11	...	2 4·98	...	34 58·8	M
29	...	2 5·00	...	35 2·3	M
Dec. 6	...	2 5·02	...	35 0·1	R
2 22 *Andromedæ.*					
Nov. 25	5·1	0 3 59·08	...	44 36 24·0	M
27	5·0	3 59·04	...	36 23·2	M
3 *κ² Sculptoris.*					
Nov. 26	5·7	0 5 22·70	...	118 28 45·4	M
28	5·7	5 22·46	...	28 45·3	M
4 88 *Pegasi γ, Algenib.*					
Nov. 12	...	0 6 57·31	...	75 29 42·9	M
Dec. 2	...	6 57·22	...	29 39·2	R
5 7 *Ceti.*					
Nov. 8	...	0 8 26·48	...	109 36 32·6	M
6 *ζ Tucanæ.*					
Nov. 14	5·0	0 13 42·50	...	155 35 31·3	M
22	5·0	13 42·43	...	35 32·6	M
7 *π Tucanæ.*					
Nov. 15	4·9	0 14 58·91	...	160 18 9·8	M
8 *ι Sculptoris.*					
Nov. 11	5·9	0 15 23·23	...	119 39 23·0	M
21	5·2	15 23·37	...	39 22·4	M
Dec. 6	5·1	15 23·22	...	39 23·1	R
11	5·7	15 23·43	...	39 20·4	R
12	5·6	15 23·53	...	39 22·9	R
9 *η Sculptoris.*					
Nov. 8	5·3	0 21 52·98	...	123 50 52·9	M
10 *Taylor* 107.					
Nov. 25	6·0	0 23 24·01	...	131 20 25·8	M
Dec. 6	6·0	23 24·10	...	20 25·1	R
13	6·0	23 24·29	...	20 24·8	R
11 12 *Ceti.*					
Dec. 11	...	0 23 48·82	...	94 37 52·5	R
12 *λ¹ Pavonis.*					
Nov. 14	5·3	0 25 31·76	...	139 28 42·4	M
13 15 *Cassiopeiæ κ—1st.*					
Nov. 21	4·3	0 26 4·65	...	27 44 29·2	M
14 *Taylor* 139.					
Nov. 27	5·5	0 27 38·88	...	120 13 50·3	M
15 *λ² Phœnicis.*					
Nov. 22	5·5	0 29 51·81	...	138 40 12·6	M
16 17 *Cassiopeiæ ζ*					
Dec. 13	...	0 30 10·74	...	36 46 28·5	R
17 29 *Andromedæ π*					
Dec. 6	4·6	0 30 21·91	...	56 56 8·9	R
18 *Radcliffe* 172.					
Nov. 11	4·9	0 32 25·77	...	41 18 59·9	M
26	4·5	32 25·90	...	18 58·4	M
Dec. 11	5·6	32 25·75	...	18 58·2	R
19 *Lacaille* 172.					
Nov. 15	5·5	0 34 42·29	...	150 8 25·6	M
20 20 *Cassiopeiæ π*					
Dec. 13	5·3	0 36 43·03	...	43 38 34·3	R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension. 1878. h. m. s.	No. of Wires.	Mean Polar Distance. 1878. ° ′ ″	Observer.
21		λ^1 *Sculptoris.*			
Dec. 12	5·4	0 36 50·55	...	129 7 58·2	R
22		16 *Ceti* β			
Nov. 9	...	0 37 27·95	...	108 39 20·8	M
14	...	37 27·74	..	39 21·9	M
25	...	37 27·65	...	39 21·0	M
27	...	37 27·73	...	39 22·9	M
28	...	37 27·76	...	39 22·8	M
23		η *Phœnicis.*			
Nov. 21	5·0	0 37 52·01	...	148 7 57·6	M
24		λ^2 *Sculptoris.*			
Dec. 18	5·2	0 38 17·93	...	129 5 38·7	R
25		34 *Andromedæ* ζ			
Nov. 8	4·9	0 40 52·31	...	66 23 48·6	M
Dec. 11	4·6	40 52·24	...	23 47·5	R
26		35 *Andromedæ* ν			
Nov. 22	4·9	0 43 5·30	...	49 35 9·3	M
27		19 *Ceti* ϕ^2			
Dec. 6	6·0	0 44 0·79	...	101 18 6·1	R
12	5·8	44 0·87	...	18 5·6	R
21	5·0	44 0·86	...	18 4·6	R
28		ρ *Phœnicis.*			
Nov. 11	5·6	0 45 7·80	...	141 39 11·7	M
12	5·5	45 7·63	...	39 10·2	M
Dec. 13	5·7	45 7·76	...	39 11·0	R
29		*Radcliffe* 247.			
Dec. 11	5·4	0 48 9·45	...	41 58 59·5	R
16	...	48 9·42	...	59 0·8	R
30		37 *Andromedæ* μ			
Nov. 15	...	0 49 58·83	...	52 9 45·8	M
Dec. 9	...	49 59·01	...	9 45·8	R
12	...	49 58·97	...	9 45·6	R
31		38 *Andromedæ* η			
Dec. 6	...	0 50 41·42	...	67 14 28·4	R
13	...	50 41·50	...	14 28·7	R
32		α *Sculptoris.*			
Nov. 14	5·3	0 52 43·53	...	120 1 2·9	M
Dec. 7	5·0	52 43·80	...	1 2·1	R
14	5·2	52 43·52	4	1 1·8	R
21	5·0	52 43·72	...	1 1·3	R
33		71 *Piscium* ϵ			
Nov. 9	...	0 56 36·66	...	82 46 1·2	M
26	...	56 36·75	...	46 1·9	M
Dec. 6	...	56 36·71	...	46 1·6	R
7	...	56 36·76	...	46 0·9	R
12	...	56 36·83	...	46 1·9	R
14	...	56 36·78	...	46 1·5	R
16	...	56 36·79	...	46 0·9	R
18	...	56 36·88	...	46 0·0	R
20	...	56 36·73	...	46 1·6	R
34		ω *Phœnicis.*			
Dec. 9	5·8	0 56 52·13	...	147 39 34·8	R
11	5·8	56 51·96	...	39 36·0	R
13	5·7	56 51·99	...	39 35·7	R
35		30 *Cassiopeiæ* μ			
Nov. 12	5·4	1 0 9·~~07~~	...	35 40 45·8	M
21	5·7	0 ~~10·25~~	...	40 44·2	M
36		41 *Andromedæ.*			
Nov. 28	5·7	1 1 1·13	...	46 42 30·5	M
Dec. 12	5·4	1 0·92	...	42 29·7	R
21	5·1	1 0·91	...	42 28·7	R

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Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
37	42 *Andromedæ* ϕ				
Dec. 11	...	1 2 25·43	...	43 24 32·9	R
38	ζ *Phœnicis—2nd.*				
Nov. 11	5·0	1 3 15·31	...	145 53 56·0	M
15	5·2	3 15·23	6	53 54·5	M
Dec 13	5·0	3 15·24	...	53 57·4	R
39	84 *Piscium* χ				
Nov. 22	5·2	1 4 53·87	...	69 36 53·3	M
Dec. 7	5·1	4 53·84	...	36 51·7	R
9	5·2	4 53·99	...	36 52·0	R
18	5·2	4 53·80	...	36 51·9	R
40	*Taylor* 396.				
Dec. 12	5·8	1 7 8·07	...	128 30 10·9	R
41	37 *Ceti.*				
Dec. 11	5·6	1 8 15·02	...	98 34 43·4	R
21	5·5	8 15·20	...	34 43·7	R
42	ν *Phœnicis.*				
Nov. 26	5·0	1 9 40·62	...	136 11 2·8	M
43	*Lacaille* 361.				
Dec. 13	6·2	1 12 49·45	...	157 2 32·3	R
44	1 *Ursæ Minoris* α, (*Polaris*).				
Nov. 25	...	1 14 1·99	2	1 20 27·4	M
27	...	14 2·22	3	20 28·1	M
	1 *Ursæ Minoris* α, (*Polaris*)—*s.p.*				
May 25	...	1 14 1·93	3	1 20 29·1	M
31	...	14 1·57	3	20 29·6	M
June 15	...	14 2·31	3	20 25·1	M
July 6	...	14 2·43	3	20 28·9	C. R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
45	46 *Andromedæ* ξ				
Nov. 21	4·9	1 15 9·54	...	45 6 39·4	M
28	5·0	15 9·63	...	6 40·0	M
Dec. 12	4·6	15 9·[illegible]	...	6 39·6	R
14	5·0	15 9·86	...	6 39·9	R
18	4·7	15 9·32	...	6 39·5	R
46	36 *Cassiopeiæ* ψ				
Dec. 11	4·8	1 17 19·75	...	22 30 25·7	R
21	4·7	17 19·66	...	30 26·0	R
47	45 *Ceti* θ^1				
Nov. 11	...	1 17 55·45	...	98 48 46·3	M
14	...	17 55·41	...	48 45·8	M
15	...	17 55·57	...	48 47·4	M
22	...	17 55·46	...	48 48·9	M
Dec. 6	...	17 55·52	...	48 47·1	R
9	...	17 55·60	...	48 45·7	R
16	...	17 55·48	...	48 47·7	R
20	...	17 55·51	...	48 47·5	R
48	c^2 *Phœnicis.*				
Dec. 7	...	1 19 16·77	...	132 7 39·6	R
49	46 *Ceti.*				
Nov. 26	5·3	1 19 37·23	5	105 14 1·5	M
50	94 *Piscium.*				
Dec. 12	5·0	1 20 6·40	5	71 23 33·4	R
51	48 *Andromedæ* ω				
Dec. 13	5·1	1 20 21·50	...	45 13 24·2	R
52	49 *Andromedæ* A.				
Dec. 14	5·2	1 22 47·38	...	43 37 22·5	R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
53		99 *Piscium* η			
Jan. 4	...	1 24 57·35	...	75 17 1·8	M
5	...	24 57·35	...	17 1·0	M
8	...	24 57·39	...	17 3·1	M
Nov. 12	...	24 57·17	...	17 1·3	M
Dec. 9	...	24 57·32	...	17 1·4	R
11	...	24 57·25	...	17 0·0	R
18	...	24 57·33	...	17 0·8	R
20	...	24 57·35	...	17 2·0	R
54		*Taylor* 502.			
Nov. 21	5·7	1 27 28·69	...	127 29 31·2	M
28	5·9	27 28·82	...	29 30·6	M
Dec. 13	5·7	27 28·76	...	29 33·6	R
21	6·0	27 28·67	...	29 29·0	R
55		*Taylor* 504.			
Dec. 7	5·6	1 27 36·67	...	140 21 8·5	R
56		49 *Ceti*.			
Dec. 12	5·8	1 28 40·22	...	106 18 7·9	R
16	...	28 39·99	...	18 6·5	R
57		50 *Andromedæ* υ			
Dec. 14	...	1 29 38·21	...	49 12 19·6	R
18	...	29 38·42	...	12 20·1	R
58		51 *Andromedæ*.			
Dec. 11	4·0	1 30 30·36	...	41 59 25·6	R
20	3·7	30 30·52	...	59 22·8	R
59		*Taylor* 543.			
Nov. 26	5·4	1 33 2·25	...	127 8 43·4	M
27	5·5	33 2·32	...	8 42·5	M
60		53 *Andromedæ* τ			
Nov. 22	5·4	1 33 22·85	...	50 2 29·3	M
Dec. 7	5·0	33 22·80	...	2 28·9	R
28	5·0	33 22·68	...	2 29·9	R
61		*Lacaille* 499.			
Dec. 31	7·0	1 34 48·70	6	156 11 ~~55·9~~	R
62		106 *Piscium* υ			
Jan. 5	...	1 35 4·81	...	85 7 48·1	M
7	...	35 4·81	...	7 48·6	M
8	...	35 4·91	...	7 48·8	M
9	...	35 4·88	...	7 47·4	M
10	...	35 4·83	...	7 47·6	M
Nov. 8	...	35 4·92	...	7 49·0	M
Dec. 9	...	35 4·81	...	7 47·5	R
12	...	35 4·92	...	7 47·6	R
21	...	35 4·96	...	7 48·5	R
63		*p Eridani—1st.*			
Dec. 13	5·7	1 35 9·66	5	146 48 56·9	R
64		54 *Andromedæ*.			
Dec. 14	4·4	1 36 1·00	...	39 55 37·9	R
65		ψ *Phœnicis*.			
Dec. 16	6·0	1 36 5·83	...	128 45 8·0	R
66		q^1 *Eridani*.			
Dec. 11	5·8	1 37 47·18	...	144 21 8·6	R
67		ε *Sculptoris*.			
Nov. 25	5.4	1 39 55·76	...	115 39 46·4	M
28	5·5	39 55·98	...	39 45·9	M
Dec. 7	5·3	39 55·80	...	39 46·2	R
12	5·4	39 55·79	4	39 45·7	R
18	5·6	39 55·92	...	39 45·2	R
68		*Taylor* 587.			
Dec. 13	5·7	1 41 18·90	...	141 25 35·3	R
28	5·5	41 18·88	...	25 38·1	R
69		55 *Ceti* χ			
Nov. 27	...	1 43 35·52	...	101 17 ~~30·8~~ 25·0	M

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
70		2 *Trianguli a*			
Dec. 11	3·6	1 46 7·64	...	61 0 58·8	R
12	3·6	46 7·71	...	1 0·3	R
14	4·0	46 7·76	...	1 0·6	R
71		5 *Arietis* γ^1*—South.*			
Dec. 21	4·6	1 46 50·18	...	71 18 18·5	R
72		5 *Arietis* γ^2*—North.*			
Dec. 20	4·6	1 46 50·31	...	71 18 9·9	R
73		6 *Arietis* β			
Jan. 5	...	1 47 54·13	...	69 47 22·0	M
7	...	47 54·17	...	47 21·4	M
8	...	47 54·00	...	47 22·1	M
9	...	47 54·14	...	47 21·5	M
10	...	47 54·08	...	47 21·3	M
Nov. 21	...	47 54·16	...	47 22·0	M
26	...	47 54·08	...	47 22·2	M
Dec. 13	...	47 54·03	...	47 21·3	R
16	...	47 54·03	..	47 21·5	R
74		*Taylor* 629.			
Dec. 7	5·0	1 48 45·46	...	136 54 1·7	R
28	5·0	48 45·40	...	54 3·3	R
75		ϕ *Phœnicis.*			
Dec. 18	5·0	1 49 18·21	...	133 5 46·5	R
76		η^1 *Hydri.*			
Dec. 31	7·5	1 49 29·82	...	158 32 45·8	R
77		*Taylor* 646.			
Nov. 27	5·5	1 52 19·80	...	137 58 54·4	M
28	5·5	52 19·80	...	58 53·7	M
78		59 *Ceti* υ			
Dec. 11	...	1 54 15·31	...	111 40 10·8	R
12	...	54 15·38	...	40 11·4	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
79		113 *Piscium a—2nd.*			
Nov. 22	3·9	1 55 43·73	...	87 49 32·7	M
Dec. 13	3·5	55 43·85	...	49 35·3	R
18	3·9	55 43·97	...	49 34·0	R
20	4·0	55 43·81	...	49 35·6	R
80		*v Fornacis.*			
Dec. 11	5·7	1 59 1·11	...	119 52 57·9	R
21	5·7	59 1·16	...	52 57·7	R
81		13 *Arietis a*			
Jan. 7	...	2 0 17·83	...	67 6 56·2	M
9	...	0 17·81	...	6 55·1	M
10	...	0 17·91	...	6 56·6	M
11	...	0 17·78	...	6 55·1	M
14	...	0 17·78	...	6 56·0	M
15	...	0 17·74	...	6 56·4	M
Nov. 25	...	0 18·04	...	6 54·4	M
Dec. 7	...	0 17·78	...	6 54·3	R
14	...	0 17·83	...	6 56·2	R
28	...	0 17·86	...	6 56·3	R
31	...	0 17·77	...	6 54·6	R
82		8 *Trianguli* δ			
Jan. 5	...	2 9 36·48	...	56 20 6·7	M
7	...	9 36·39	...	20 6·7	M
83		67 *Ceti.*			
Nov. 15	...	2 10 53·77	...	96 59 5·3	M
27	...	10 53·95	...	59 6·2	M
28	...	10 53·96	...	59 5·6	M
Dec. 7	...	10 53·96	...	59 4·3	R
11	...	10 53·82	...	59 4·8	R
13	...	10 53·88	...	59 4·1	R
21	...	10 53·83	...	59 4·3	R
31	...	10 53·88	...	59 5·2	R
84		π^1 *Hydri.*			
Jan. 8	5·7	2 11 41·95	...	158 24 45·1	M
9	6·0	11 41·88	...	24 43·6	M
10	5·8	11 42·04	...	24 45·0	M

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
85		π^2 *Hydri.*			
Jan. 11	5·5	2 12 56·68	...	158 18 46·2	M
14	5·7	12 56·55	...	18 44·7	M
15	5·8	12 56·53	...	18 43·9	M
16	5·7	12 56·61	...	18 46·3	M
86		9 *Persei i*			
Nov. 26	5·6	2 13 51·37	...	34 42 48·4	M
Dec. 12	5·2	13 51·42	...	42 50·0	R
14	5·3	13 51·40	...	42 50·0	R
18	5·3	13 51·34	...	42 47·1	R
20	5·4	13 51·21	...	42 48·6	R
87		*Taylor* 798.			
Jan. 9	5·7	2 17 24·86	...	133 45 30·8	M
10	5·6	17 24·70	...	45 30·8	M
17	5·7	17 24·81	...	45 31·3	M
88		*Taylor* 810.			
Nov. 27	5·6	2 18 37·08	...	141 38 58·2	M
Dec. 13	5·7	18 36·92	...	38 59·2	R
21	5·8	18 36·98	...	38 56·8	R
89		*Radcliffe* 706.			
Jan. 5	4·5	2 19 1·96	...	23 8 50·3	M
7	4·4	19 2·10	...	8 50·9	M
8	4·5	19 2·07	...	8 51·0	M
90		72 *Ceti* ρ			
Dec. 7	5·0	2 20 3·25	...	102 50 29·5	R
11	5·2	20 3·24	4	50 29·9	R
91		73 *Ceti* ξ^2			
Dec. 14	...	2 21 40·40	...	82 5 14·8	R
18	...	21 40·29	...	5 13·8	R
28	...	21 40·43	...	5 15·6	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
92		κ *Eridani.*			
Dec. 20	4·6	2 22 30·90	...	138 15 7·5	R
31	5·0	22 30·70	...	15 6·2	R
93		75 *Ceti.*			
Dec. 12	5·7	2 25 56·97	...	91 34 30·3	R
13	5·7	25 56·93	...	34 29·6	R
94		76 *Ceti* σ			
Dec. 11	5·2	2 26 18·02	...	105 46 52·3	R
21	5·0	26 18·01	...	46 50·5	R
95		78 *Ceti* ν			
Nov. 22	4·7	2 29 28·38	...	84 56 24·4	M
28	4·9	29 28·30	...	56 24·1	M
Dec. 7	5·0	29 28·42	...	56 22·9	R
20	5·0	29 28·49	...	56 24·0	R
96		81 *Ceti.*			
Nov. 16	...	2 31 33·06	...	93 55 31·8	M
Dec. 13	5·7	31 33·00	...	55 31·6	R
97		η *Horologii.*			
Dec. 12	5·7	2 33 22·80	...	143 4 19·2	R
21	5·7	33 22·75	...	4 17·6	R
98		83 *Ceti* ϵ			
Dec. 11	4·8	2 33 39·77	...	102 23 27·3	R
99		*Taylor* 906.			
Dec. 31	6·0	2 35 8·74	...	133 24 57·1	R
100		13 *Persei* θ			
Dec. 20	4·4	2 35 52·35	...	41 17 20·8	R
101		35 *Arietis.*			
Dec. 7	4·5	2 36 17·78	...	62 48 45·8	R
14	4·5	36 17·69	...	48 47·6	R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
102		86 *Ceti* γ—2*nd*.			
Jan. 4	...	2 36 58·82	...	87 16 45·7	M
11	...	36 58·79	...	16 47·1	M
14	...	36 58·73	...	16 46·5	M
17	...	36 58·84	...	16 45·5	M
Nov. 15	...	36 58·74	...	16 46·2	M
Dec. 28	...	36 58·69	...	16 46·1	R
103		1 *Eridani* τ^1			
Dec. 11	4·8	2 39 24·61	...	109 5 23·5	R
13	4·9	39 24·65	...	5 24·7	R
104		39 *Arietis*.			
Dec. 12	4·6	2 40 38·77	...	61 15 41·1	R
21	4·1	40 38·75	...	15 38·8	R
105		γ *Fornacis*.			
Dec. 14	6·0	2 44 26·70	...	115 3 45·8	R
20	5·8	44 26·67	...	3 46·2	R
106		η *Fornacis*.			
Nov. 16	5·9	2 45 18·74	...	126 21 0·6	M
Dec. 28	5·5	45 18·78	...	21 1·2	R
107		2 *Eridani* τ^2			
Dec. 13	4·8	2 45 30·08	...	111 30 28·9	R
21	4·6	45 30·11	...	30 26·6	R
108		η^3 *Fornacis*.			
Dec. 7	5·7	2 45 44·67	...	126 10 43·9	R
109		*Lacaille* 943.			
Dec. 12	5·8	2 49 6·97	...	158 1 25·9	R
110		4 *Eridani*.			
Dec. 11	5·7	2 51 58·13	...	114 21 9·3	R
20	5·9	51 58·21	...	21 9·4	R
28	5·6	51 58·00	...	21 9·2	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
111		6 *Eridani*.			
Dec. 7	5·6	2 52 40·18	...	114 5 49·1	R
14	6·0	52 40·12	...	5 52·0	R
112		92 *Ceti a, Menkar*.			
Jan. 4	...	2 55 54·07	...	86 23 23·3	M
14	...	55 54·25	...	23 21·3	M
15	...	55 54·18	...	23 22·6	M
16	...	55 54·00	...	23 21·8	M
17	...	55 54·04	...	23 23·3	M
Dec. 13	...	55 54·10	...	23 22·2	R
21	...	55 54·10	...	23 22·2	R
31	...	55 54·18	...	23 21·7	R
113		23 *Persei* γ			
Dec. 18	3·6	2 55 57·86	...	36 58 21·1	R
114		10 *Eridani* ρ^3			
Dec. 7	5·3	2 58 17·05	...	98 4 44·1	R
12	5·4	58 16·97	...	4 44·8	R
115		27 *Persei* κ			
Dec. 20	...	3 1 16·19	...	45 36 24·0	R
28	...	1 15·91	...	36 23·6	R
116		28 *Persei* ω			
Dec. 13	5·3	3 3 25·08	...	50 51 11·4	R
18	5·1	3 24·96	...	51 10·9	R
117		*R. P. L.* 33.			
Jan. 5	...	3 3 43·33	3	5 31 34·5	M
8	...	3 43·05	3	31 34·4	M
10	...	3 43·18	3	31 34·0	M
14	...	3 43·36	3	31 34·1	M
Dec. 7	...	3 42·86	3	31 32·9	R
21	...	3 42·97	3	31 34·3	R
118		57 *Arietis* δ			
Jan. 11	...	3 4 39·30	...	70 44 11·1	M
15	...	4 39·34	...	44 11·0	M
Dec. 12	...	4 39·22	...	44 10·1	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
119		95 *Ceti.*			
Dec. 13	5·7	3 12 7·92	...	91 22 33·6	R
18	5·7	12 8·03	...	22 32·0	R
120		96 *Ceti* κ^1			
Dec. 31	...	3 12 57·80	...	87 4 41·7	R
121		15 *Eridani.*			
Dec. 21	...	3 12 58·35	...	112 57 28·2	R
122		*e Eridani.*			
Dec. 12	4·6	3 15 3·59	...	133 32 15·3	R
28	4·6	15 3·61	...	32 14·4	R
123		*Radcliffe* 956.			
Dec. 11	4·3	3 19 11·87	...	30 29 12·6	R
18	4·3	19 11·90	...	29 12·6	R
124		*Radcliffe* 969.			
Dec. 12	5·4	3 20 ~~41·11~~	...	34 58 18·2	R
125		35 *Persei* σ			
Dec. 14	...	3 21 58·59	...	42 25 40·0	R
126		*R. P. L.* 34.			
Jan. 18	...	3 26 42·25	2	3 44 27·0	M
22	...	26 41·65	3	44 29·1	M
26	...	26 42·11	3	44 30·0	M
		R. P. L. 34—*s.p.*			
July 9	...	3 26 42·21	3	3 44 30·8	C. R
127		37 *Persei* ψ			
Dec. 13	...	3 27 49·23	...	42 12 52·1	R
21	...	27 49·18	...	12 51·4	R
128		*Lacaille* 1164.			
Dec. 7	5·8	3 29 36·28	5	156 54 12·4	R
28	5·6	29 36·37	...	54 12·9	R
129		10 *Tauri.*			
Dec. 11	5·0	3 30 38·87	...	89 59 10·0	R
14	4·8	30 38·84	...	59 11·7	R
18	4·5	30 38·79	...	59 10·8	R
130		22 *Eridani.*			
Dec. 21	5·6	3 34 35·88	...	95 36 19·6	R
31	6·0	34 35·97	...	36 21·5	R
131		40 *Persei o*			
Dec. 28	...	3 36 40·15	...	58 6 0·0	R
132		25 *Tauri* η, *Alcyone.*			
Jan. 16	...	3 40 14·01	...	66 16 27·2	M
17	...	40 14·02	...	16 26·1	M
18	...	40 14·12	...	16 25·0	M
21	...	40 14·02	...	16 25·5	M
22	...	40 14·02	...	16 26·3	M
23	...	40 14·03	...	16 27·6	M
24	...	40 14·04	...	16 27·1	M
26	...	40 14·02	...	16 27·7	M
133		28 *Tauri, Pleione.*			
Dec. 21	5·6	3 41 55·66	...	66 14 13·7	R
134		44 *Persei* ζ			
Dec. 14	3·6	3 46 27·82	...	58 28 50·1	R
135		32 *Eridani—South.*			
Dec. 20	5·0	3 48 9·78	...	93 19 1·3	R
31	5·0	48 9·84	...	18 59·9	R
136		v^3 *Eridani.*			
Dec. 11	5·2	3 49 0·03	...	125 5 39·5	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
137		45 *Persei* ϵ			
Dec. 21	3·6	3 49 40·02	...	50 20 39·2	R
138		34 *Eridani* γ^1			
Jan. 16	...	3 52 20·32	...	103 51 25·9	M
21	...	52 20·27	...	51 24·1	M
22	...	52 20·26	...	51 24·4	M
23	...	52 20·20	...	51 23·9	M
24	...	52 20·18	...	51 25·3	M
26	...	52 20·15	...	51 26·0	M
28	...	52 20·13	...	51 24·6	M
29	...	52 20·19	...	51 24·1	M
139		36 *Eridani* τ^9			
Dec. 14	...	3 54 43·26	4	114 21 48·5	R
140		38 *Tauri* ν			
Dec. 21	5·1	3 56 39·97	...	84 21 0·3	R
141		*R. P. L.* 35.			
Dec. 28	...	3 58 48·84	3	4 46 9·4	R
		R. P. L. 35—*s.p.*			
July 13	...	3 58 49·68	5	4 46 12·3	C. R
142		38 *Eridani* o^1			
Jan. 25	...	4 5 54·60	...	97 9 22·7	M
143		51 *Persei* μ			
Dec. 20	4·6	4 5 56·42	3	41 54 10·4	R
28	4·6	5 56·47	...	54 8·9	R
144		δ *Horologii.*			
Jan. 17	5·0	4 6 44·45	...	132 18 48·6	M
18	5·0	6 44·19	...	18 46·1	M
19	5·1	6 44·40	...	18 45·7	M
Feb. 2	5·0	6 44·17	...	18 45·2	R
4	5·0	6 44·34	...	18 46·6	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
145		ψ *Horologii*—1*st.*			
Dec. 28	5·2	4 15 24·71	...	134 33 40·3	R
146		θ *Reticuli.*			
Jan. 19	5·5	4 16 19·07	...	153 33 9·7	M
22	5·5	16 18·77	...	33 7·9	M
23	5·8	16 18·92	...	33 8·7	M
Feb. 5	5·0	16 18·92	...	33 7·2	R
6	5·0	16 18·98	...	33 7·3	R
147		74 *Tauri* ϵ			
Jan. 25	...	4 21 29·59	...	71 5 31·2	M
28	...	21 29·66	...	5 32·3	M
29	...	21 29·52	...	5 31·5	M
30	...	21 29·51	...	5 31·8	M
31	...	21 29·50	...	5 31·5	M
Feb. 1	...	21 29·54	...	5 31·0	R
5	...	21 29·61	...	5 30·2	R
148		78 *Tauri* θ^2			
Dec. 28	...	4 21 41·~~42~~ 68	...	74 24 ~~10~~ 7 1	R
149		δ *Cœli.*			
Jan. 17	5·5	4 27 6·21	...	135 13 1·6	M
18	5·4	27 6·19	...	13 0·9	M
22	5·4	27 6·18	...	12 58·6	M
Feb. 1	5·0	27 6·14	...	13 0·0	R
2	5·0	27 6·19	...	12 58·8	R
150		87 *Tauri* α, *Aldebaran.*			
Jan. 30	...	4 28 55·30	...	73 44 17·2	M
Feb. 6	...	28 55·28	...	44 14·6	R
8	...	28 55·27	...	44 15·5	R
151		β *Cœli.*			
Jan. 18	5·2	4 37 44·73	...	127 23 2·6	M
23	5·5	37 44·53	...	23 2·8	M
25	5·5	37 44·64	...	23 1·5	M
Feb. 1	5·0	37 44·64	...	23 1·9	R
4	5·0	37 44·73	...	23 2·3	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
152		*λ Pictoris.*			
Jan. 22	5·0	4 39 38·98	...	140 42 41·2	M
26	5·3	39 39·03	...	42 43·2	M
28	5·4	39 38·95	...	42 41·3	M
Feb. 2	5·0	39 38·91	...	42 40·3	R
5	5·0	39 38·94	...	42 40·9	R
153		*κ Doradûs.*			
Jan. 24	5·5	4 42 30·96	...	149 57 26·8	M
154		*3 Aurigæ ι*			
Jan. 29	...	4 49 3·03	...	57 1 44·2	M
31	...	49 2·96	...	1 44·8	M
Feb. 4	...	49 2·88	...	1 43·5	R
6	...	49 2·94	...	1 42·4	R
7	...	49 2·98	...	1 43·4	R
9	...	49 3·06	...	1 42·6	R
155		*γ^1 Cœli.*			
Jan. 17	5·1	5 0 1·35	...	125 39 3·6	M
18	5·0	0 1·17	...	39 2·8	M
23	5·4	0 1·10	...	39 3·7	M
Feb. 1	5·0	0 1·22	...	39 4·5	R
4	5·0	0 1·19	...	39 3·4	R
156		*γ^2 Cœli.*			
Jan. 22	5·8	5 0 4·81	...	125 52 33·3	M
24	5·7	0 4·86	...	52 34·3	M
25	5·6	0 4·94	...	52 34·5	M
Feb. 2	5·5	0 4·96	...	52 32·4	R
5	5·5	0 5·03	...	52 33·1	R
157		*2 Leporis ϵ*			
Jan. 30	...	5 0 17·77	...	112 32 10·4	M
31	...	0 17·83	...	32 9·9	M
Feb. 11	...	0 17·65	...	32 9·2	R
12	...	0 17·71	...	32 9·7	R
15	...	0 17·77	...	32 8·7	R
158		*β Mensæ.*			
Jan. 26	5·7	5 4 18·48	5	161 28 55·3	M
28	5·8	4 18·42	...	28 52·9	M
29	5·7	4 18·31	...	28 55·7	M
Feb. 6	5·8	4 18·33	3	28 51·2	R
8	5·5	4 18·43	...	28 55·6	R
159		*19 Orionis β, Rigel.*			
Feb. 11	...	5 8 40·42	...	98 20 37·0	R
13	...	8 40·54	...	20 38·1	R
19	...	8 40·44	...	20 37·9	R
160		*o Columbæ.*			
Jan. 23	5·0	5 13 5·05	...	125 0 57·9	M
24	5·0	13 5·18	...	0 53·9	M
25	5·2	13 5·13	...	0 56·8	M
Feb. 4	5·0	13 5·24	...	0 56·3	R
7	5·0	13 5·15	...	0 57·1	R
161		*θ Doradûs.*			
Jan. 16	5·0	5 13 51·47	...	157 19 25·6	M
26	5·1	13 51·51	...	19 22·9	M
28	5·0	13 51·53	...	19 22·8	M
Feb. 5	5·0	13 51·57	...	19 22·2	R
6	5·0	13 51·52	...	19 22·3	R
162		*ζ Pictoris.*			
Jan. 22	5·3	5 16 22·59	...	140 44 14·9	M
29	5·4	16 22·52	...	44 17·0	M
30	5·6	16 22·72	...	44 16·8	M
Feb. 9	5·0	16 22·53	...	44 14·0	R
11	5·0	16 22·57	...	44 14·2	R
163		*112 Tauri β*			
Jan. 19	...	5 18 34·74	...	61 29 52·6	M
21	...	18 34·78	...	29 51·3	M
Feb. 1	...	18 34·84	...	29 52·0	R
2	...	18 34·86	...	29 50·4	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
164		*κ Pictoris.*			
Jan. 18	5·5	5 20 7·50	...	146 14 56·6	M
Feb. 4	5·0	20 7·48	...	14 58·7	R
5	5·0	20 7·47	...	14 58·9	R
7	5·0	20 7·44	...	14 55·8	R
12	5·0	20 7·47	...	14 56·5	R
165		*θ Pictoris—2nd.*			
Jan. 24	6·0	5 22 0·31	...	142 25 22·1	M
Feb. 8	5·3	22 0·38	...	25 24·3	R
13	5·5	22 0·33	...	25 22·9	R
14	5·5	22 0·18	...	25 24·0	R
15	5·5	22 0·24	...	25 23·4	R
166		*R. P. L.* 40.			
Jan. 29	...	5 23 3·79	3	4 52 14·2	M
31	...	23 3·84	3	52 14·2	M
Feb. 9	...	23 4·77	3	52 15·1	R
16	...	23 4·41	3	52 13·8	R
20	...	23 4·69	3	52 14·2	R
		R. P. L. 40—*s.p.*			
Aug. 19	...	5 23 3·81	3	4 52 14·7	R
167		34 *Orionis δ, Var.* 1.			
Feb. 5	...	5 25 46·42	...	90 23 24·5	R
21	...	25 46·47	...	23 25·5	R
168		11 *Leporis α*			
Feb. 14	...	5 27 20·96	...	107 54 38·5	R
169		37 *Orionis* ϕ^1			
Jan. 23	4·6	5 28 7·24	...	80 35 42·2	M
25	4·6	28 7·28	...	35 38·2	M
Feb. 1	4·5	28 7·47	...	35 40·2	R
4	4·5	28 7·43	...	35 39·2	R
7	4·5	28 7·48	...	35 39·9	R
170		39 *Orionis* λ—1*st.*			
Jan. 26	4·0	5 28 25·03	...	80 8 58·0	M
30	4·0	28 25·11	...	8 56·3	M
Feb. 2	4·0	28 25·18	...	8 57·0	R
6	4·0	28 25·02	...	8 55·9	R
11	4·0	28 24·91	...	8 57·0	R
171		46 *Orionis* ε			
Feb. 12	...	5 30 1·35	...	91 16 53·0	R
16	...	30 1·36	...	16 51·6	R
20	...	30 1·24	...	16 51·9	R
172		40 *Orionis* ϕ^2			
Jan. 22	4·8	5 30 12·15	...	80 46 36·3	M
Feb. 8	4·5	30 12·19	...	46 37·6	R
9	4·5	30 12·02	...	46 37·0	R
13	4·5	30 12·04	...	46 36·5	R
15	4·5	30 12·19	...	46 36·0	R
173		*a Columbæ.*			
Jan. 18	...	5 35 13·79	...	124 8 24·3	M
Mar. 5	...	35 13·97	...	8 23·1	M
174		14 *Leporis ζ*			
Jan. 22	...	5 41 25·53	...	104 52 6·7	M
25	...	41 25·41	...	52 5·9	M
28	...	41 25·62	...	52 7·0	M
Feb. 1	...	41 25·71	...	52 6·9	R
4	...	41 25·60	...	52 6·3	R
175		*μ Columbæ.*			
Jan. 23	5·5	5 41 27·95	...	122 21 15·6	M
26	5·4	41 27·75	...	21 16·0	M
Feb. 2	5·4	41 27·71	...	21 14·0	R
5	5·5	41 27·79	...	21 15·3	R
6	5·5	41 27·70	...	21 14·0	R
176		*β Pictoris.*			
Jan. 24	4·4	5 44 23·98	...	141 6 40·6	M
31	4·6	44 23·94	...	6 41·1	M
Feb. 7	4·5	44 23·89	3	6 40·4	R
9	4·5	44 23·78	...	6 42·8	R
11	4·5	44 23·88	...	6 40·9	R

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177		*δ Doradûs.*			
Jan. 29	4·4	5 44 33·48	...	155 46 52·8	M
Feb. 8	4·5	44 33·35	...	46 54·1	R
12	4·5	44 33·43	...	46 56·5	R
14	4·5	44 33·36	...	46 53·1	R
16	4·5	44 33·32	...	46 54·6	R
178		15 *Leporis δ*			
Jan. 30	...	5 46 4·31	...	110 53 27·4	M
Feb. 4	...	46 4·47	...	53 24·7	R
6	...	46 4·53	...	53 24·0	R
13	...	46 4·40	...	53 25·6	R
15	...	46 4·53	...	53 25·2	R
179		*γ Pictoris.*			
Feb. 1	4·5	5 47 36·78	...	146 11 52·0	R
5	4·5	47 36·77	...	11 50·9	R
19	4·6	47 36·71	...	11 51·5	R
Mar. 4	4·8	47 36·69	...	11 51·8	M
5	...	47 36·86	...	11 52·4	M
180		58 *Orionis α, Var.* 2, *Betelgeux.*			
Jan. 18	...	5 48 34·16	...	82 37 2·1	M
19	...	48 34·07	...	37 1·0	M
Feb. 9	...	48 33·94	...	37 0·9	R
Mar. 6	...	48 33·99	...	37 0·9	M
7	...	48 34·11	...	37 1·2	M
8	...	48 34·05	...	37 0·1	M
9	...	48 34·06	...	37 1·6	M
12	...	48 33·95	...	37 0·5	M
181		*λ Columbæ.*			
Jan. 31	5·2	5 48 40·94	...	123 49 43·9	M
Feb. 2	5·0	48 41·08	...	49 44·8	R
18	5·0	48 40·92	...	49 44·8	R
20	5·0	48 41·08	...	49 43·8	R
22	5·0	48 41·15	...	49 46·9	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
182		*ε Doradûs.*			
Jan. 26	5·5	5 50 1·50	...	156 55 55·2	M
28	5·2	50 1·53	...	55 54·3	M
Feb. 11	5·0	50 1·43	...	55 52·9	R
12	5·0	50 1·42	...	55 55·7	R
14	5·0	50 1·48	...	55 53·2	R
183		61 *Orionis μ*			
Jan. 22	5·2	5 55 40·21	...	80 21 15·2	M
29	5·0	55 40·34	...	21 14·3	M
Feb. 1	5·0	55 40·47	...	21 15·2	R
2	5·0	55 40·33	...	21 13·9	R
5	5·0	55 40·44	...	21 14·6	R
184		*R. P. L.* 43.			
Feb. 4	...	5 58 14·66	3	3 14 15·4	R
6	...	58 15·51	3	14 15·0	R
13	...	58 14·51	3	14 16·6	R
25	...	58 14·57	3	14 14·0	R
		R. P. L. 43—*s.p.*			
Aug 15	...	5 58 18·62	3	3 14 12·8	R
185		67 *Orionis ν*			
Feb. 2	...	6 0 36·36	...	75 13 5·2	R
20	...	0 36·48	...	13 4·1	R
22	...	0 36·36	...	13 5·3	R
26	...	0 36·40	...	13 5·6	R
Mar. 2	...	0 36·42	...	13 5·3	R
11	...	0 36·47	...	13 7·4	M
12	...	0 36·49	...	13 6·6	M
13	...	0 36·48	...	13 6·6	M
186		18 *Leporis θ*			
Jan. 23	4·6	6 0 37·98	...	104 55 33·7	M
Feb. 7	4·5	0 38·04	...	55 31·3	R
9	4·6	0 38·09	...	55 30·2	R
14	4·6	0 38·04	...	55 32·1	R
15	4·6	0 38·13	...	55 31·9	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
187		π^1 *Columbæ.*			
Jan. 25	5·6	6 2 54·86	...	132 17 3·7	M
30	5·7	2 54·69	...	17 2·8	M
Feb. 5	5·7	2 54·80	...	17 1·2	R
8	5·6	2 54·81	...	17 3·2	R
11	5·7	2 54·72	...	17 3·3	R
188		*θ Columbæ.*			
Jan. 28	5·4	6 3 20·64	...	127 14 11·8	M
31	5·3	3 20·44	...	14 10·0	M
Feb. 12	5·0	3 20·68	...	14 6·9	R
18	5·0	3 20·61	...	14 7·9	R
21	5·0	3 20·62	...	14 9·2	R
189		π^2 *Columbæ.*			
Jan. 26	5·4	6 4 5·71	...	132 8 9·5	M
Feb. 13	5·5	4 5·58	...	8 8·4	R
16	5·6	4 5·50	...	8 8·4	R
19	5·5	4 5·59	...	8 6·8	R
Mar. 5	5·9	4 5·73	...	8 8·3	M
190		70 *Orionis* ξ			
Jan. 22	...	6 5 0·14	...	75 45 57·1	M
29	...	5 0·04	...	45 56·5	M
Feb. 1	...	5 0·27	...	45 56·1	R
4	...	5 0·09	...	45 55·3	R
6	...	5 0·30	...	45 54·0	R
191		44 *Aurigæ* κ			
Feb. 7	4·0	6 7 36·20	...	60 27 29·8	R
9	4·2	7 36·33	...	27 29·1	R
14	4·0	7 36·14	...	27 30·8	R
Mar. 4	4·4	7 36·29	...	27 31·5	M
6	4·5	7 36·40	...	27 32·2	M
192		5 *Monocerotis.*			
Feb. 8	4·6	6 8 54·52	...	96 14 19·6	R
13	4·5	8 54·30	...	14 19·4	R
15	4·5	8 54·41	...	14 19·2	R
18	4·5	8 54·40	...	14 20·0	R
Mar. 8	4·6	8 54·36	...	14 19·7	M

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
193		*ν Doradûs.*			
Feb. 5	5·6	6 9 31·14	...	158 49 0·6	R
12	5·5	9 31·10	...	49 0·3	R
19	5·5	9 31·27	...	49 1·7	R
Mar. 11	5·7	9 31·19	...	49 1·8	M
194		η^2 *Doradûs.*			
Jan. 23	5·5	6 10 59·55	...	155 33 40·5	M
24	5·4	10 59·66	...	33 39·9	M
31	5·3	10 59·51	...	33 39·9	M
Feb. 1	5·5	10 59·72	...	33 39·8	R
11	5·6	10 59·59	...	33 39·1	R
195		κ *Columbæ.*			
Jan. 21	4·6	6 12 12·84	...	125 6 3·5	M
25	4·4	12 12·60	...	6 3·5	M
29	4·6	12 12·62	...	6 4·0	M
Feb. 2	4·5	12 12·52	...	6 5·5	R
9	4·6	12 12·62	...	6 3·2	R
196		13 *Geminorum* μ			
Jan. 19	...	6 15 34·87	...	67 25 35·3	M
22	...	15 34·71	...	25 33·6	M
28	...	15 34·77	...	25 33·2	M
Feb. 6	...	15 34·81	...	25 31·9	R
7	...	15 34·86	...	25 33·1	R
8	...	15 34·84	...	25 32·5	R
13	...	15 34·75	...	25 32·2	R
14	...	15 34·80	...	25 32·2	R
18	...	15 34·84	...	25 31·8	R
21	...	15 34·86	...	25 31·7	R
27	...	15 34·82	...	25 31·5	R
Mar. 13	...	15 34·75	...	25 33·9	M
197		λ *Canis Majoris.*			
Feb. 1	4·5	6 23 38·98	...	122 30 16·1	R
2	4·5	23 38·84	...	30 15·1	R
5	4·5	23 38·71	...	30 15·7	R
15	4·5	23 38·79	...	30 14·7	R
Mar. 1	4·6	23 39·02	...	30 15·0	R
2	5·0	23 38·98	...	30 16·0	R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
198		*π*¹ *Doradûs.*			
Feb. 4	5·5	6 23 47·48	...	159 55 0·1	R
7	5·5	23 47·52	...	54 59·6	R
9	5·6	23 47·40	...	54 57·2	R
16	5·6	23 47·48	...	55 1·9	R
Mar. 4	5·7	23 47·61	...	55 1·4	M
199		*π*² *Doradûs.*			
Feb. 8	5·5	6 26 30·91	...	159 37 18·1	R
12	5·5	26 30·92	...	37 14·5	R
14	5·5	26 31·12	...	37 13·4	R
Mar. 7	5·7	26 30·99	...	37 15·2	M
9	5·8	26 31·12	...	37 15·4	M
200		4 *Canis Majoris* *ξ*¹			
Feb. 6	...	6 26 46·34	...	113 19 54·4	R
11	...	26 46·23	...	19 55·3	R
13	...	26 46·32	...	19 54·3	R
Mar. 5	...	26 46·49	...	19 55·0	M
6	...	26 46·39	...	19 54·0	M
201		5 *Canis Majoris* *ξ*²			
Feb. 5	5·0	6 29 56·53	...	112 52 9·3	R
9	5·0	29 56·58	...	52 7·4	R
21	5·0	29 56·68	...	52 9·2	R
Mar. 2	5·0	29 56·78	...	52 9·7	R
8	5·3	29 56·72	...	52 9·8	M
202		*μ Victoris.*			
Feb. 7	5·5	6 30 9·03	...	148 39 43·7	R
19	5·5	30 9·04	...	39 43·4	R
20	5·5	30 8·95	...	39 41·8	R
Mar. 11	5·6	30 9·26	...	39 45·7	M
12	5·4	30 9·23	...	39 42·2	M
203		24 *Geminorum* *γ*			
Jan. 25	...	6 30 39·73	...	73 29 55·4	M
26	...	30 39·85	...	29 57·5	M
Feb. 1	...	30 39·87	...	29 54·7	R
2	...	30 39·84	...	29 54·6	R
Feb. 11	...	6 30 39·94	...	73 29 53·0	R
15	...	30 39·80	...	29 54·3	R
16	...	30 39·78	...	29 54·0	R
18	...	30 39·83	...	29 55·2	R
22	...	30 39·78	...	29 54·1	R
28	...	30 39·83	...	29 53·3	R
Mar. 1	...	30 39·76	...	29 54·3	R
204		7 *Canis Majoris* *ν*²			
Feb. 13	...	6 31 21·57	...	109 9 10·3	R
14	...	31 21·65	...	9 10·2	R
Mar. 13	...	31 21·63	...	9 10·3	M
15	...	31 21·62	...	9 10·6	M
205		8 *Canis Majoris* *ν*³			
Feb. 6	...	6 32 31·20	...	108 7 57·6	R
12	...	32 31·43	...	7 57·8	R
Mar. 5	...	32 31·45	...	7 57·2	M
6	...	32 31·47	...	7 58·1	M
206		*Taylor* 2633.			
Feb. 2	5·0	6 35 22·64	...	138 6 40·6	R
8	5·0	35 22·57	...	6 43·2	R
9	5·0	35 22·53	...	6 41·0	R
Mar. 2	5·0	35 22·45	...	6 41·8	R
4	5·0	35 22·74	...	6 42·4	M
207		*Lalande* 12863.			
Jan. 23	7·4	6 35 26·40	...	83 32 25·9	M
26	7·7	35 26·14	...	32 25·8	M
208		18 *Monocerotis.*			
Feb. 1	5·0	6 41 30·18	...	87 27 21·0	R
4	5·0	41 30·20	...	27 20·0	R
6	5·0	41 30·03	...	27 18·9	R
11	5·0	41 29·97	...	27 19·5	R
Mar. 7	5·3	41 29·98	...	27 21·2	M
209		51 *Cephei* (*Hev.*).			
Mar. 9	...	6 42 46·03	3	2 46 5·1	M
12	...	42 46·23	3	46 5·7	M

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
233	*γ Volantis—2nd.*				
Feb. 21	5·0	7 9 46·42	...	160 18 4·8	R
26	5·0	9 46·62	...	18 2·7	R
27	5·0	9 46·67	...	18 2·9	R
Mar. 27	5·0	9 46·44	...	18 1·0	M
28	5·0	9 46·63	...	18 4·7	M
234	30 *Canis Majoris*				
Feb. 2	...	7 13 38·91	...	114 43 56·5	R
9	...	13 38·75	...	43 56·6	R
13	...	13 38·87	...	43 56·9	R
Mar. 8	...	13 39·00	...	43 56·7	M
9	...	13 39·01	...	43 56·1	M
235	*Taylor* 2982.				
Feb. 4	5·0	7 14 24·06	...	128 59 17·0	R
5	5·0	14 24·00	...	59 17·3	R
15	5·0	14 23·84	...	59 15·5	R
Mar. 11	5·0	14 23·90	...	59 17·2	M
14	5·4	14 23·88	...	59 16·6	M
236	*δ Volantis.*				
Feb. 11	5·0	7 16 52·92	...	157 44 1·7	R
12	5·0	16 52·88	...	44 2·6	R
14	5·0	16 53·12	...	44 1·1	R
18	5·0	16 53·09	...	44 3·7	R
Mar. 1	5·0	16 52·98	...	44 2·9	R
2	5 0	16 53·00	...	44 1·7	R
237	62 *Geminorum ρ*				
Feb. 2	...	7 21 15·60	...	57 58 27·9	R
5	...	21 15·69	...	58 27·9	R
7	...	21 15·72	...	58 28·1	R
Mar. 4	...	21 15·73	...	58 28·0	M
6	...	21 15·77	...	58 27·6	M
238	*Taylor* 3075.				
Feb. 16	5·0	7 24 22·25	...	121 12 19·8	R
19	5·0	24 22·48	...	12 20·4	R
21	5·0	24 22·31	...	12 20·2	R
Mar. 1	5·0	24 22·46	...	12 19·0	R
7	5·2	24 22·59	...	12 19·6	M

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
239	κ^3 *Puppis.*				
Feb. 20	5·0	7 25 58·04	...	120 42 23·1	R
22	5·0	25 58·16	...	42 24·3	R
25	5·0	25 58·03	...	42 24·0	R
Mar. 2	5·0	25 58·11	...	42 23·6	R
5	5·5	25 58·02	...	42 24·9	M
240	66 *Geminorum* a^2, *Castor.*				
Feb. 4	...	7 26 48·91	...	57 50 44·1	R
9	...	26 48·86	...	50 44·4	R
14	...	26 48·89	...	50 43·6	R
18	...	26 48·83	...	50 45·4	R
Mar. 18	...	26 48·80	...	50 44·7	M
19	...	26 48·77	...	50 45·1	M
20	...	26 48·90	...	50 45·5	M
21	...	26 48·88	...	50 45·0	M
22	...	26 48·84	...	50 45·7	M
23	...	26 48·91	...	50 45·4	M
25	...	26 49·04	...	50 42·1	M
26	...	26 48·98	...	50 44·9	M
27	...	26 48·92	...	50 45·5	M
28	...	26 48·89	...	50 45·5	M
29	...	26 49·06	...	50 46·1	M
30	...	26 48·72	...	50 44·4	M
241	n^1 *Puppis.*				
Feb. 19	4·5	7 29 9·42	...	113 12 30·6	R
26	4·5	29 9·26	...	12 32·1	R
Mar. 9	5·1	29 9·33	...	12 31·4	M
11	5·0	29 9·30	...	12 32·7	M
12	5·3	29 9·38	...	12 32·1	M
242	n^2 *Puppis.*				
Feb. 21	6·0	7 29 10·12	...	113 12 34·2	R
27	5·0	29 9·91	...	12 34·1	R
Mar. 8	6·0	29 9·84	...	12 34·4	M
13	6·1	29 9·97	...	12 34·2	M
14	6·0	29 9·84	...	12 35·6	M

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
243		*g Puppis.*			
Feb. 22	5·0	7 29 27·19	...	115 51 1·8	R
25	5·0	29 27·12	...	51 1·7	R
28	5·0	29 27·13	...	51 0·5	R
Mar. 15	5·9	29 27·15	...	51 2·1	M
16	5·8	29 27·01	...	51 2·1	M
244		10 *Canis Minoris a, Procyon.*			
Feb. 13	...	7 32 54·92	...	84 27 47·5	R
16	...	32 54·91	...	27 46·6	R
Mar. 1	...	32 54·93	...	27 46·1	R
245		κ^1 *Puppis.*			
Feb. 18	4·6	7 33 49·18	...	116 31 32·4	R
21	4·6	33 49·21	...	31 31·8	R
27	4·5	33 49·16	...	31 30·7	R
Mar. 18	5·1	33 49·39	...	31 29·7	M
19	5·0	33 49·59	...	31 30·6	M
246		κ^2 *Puppis.*			
Feb. 20	5·0	7 33 49·93	...	116 31 37·7	R
26	5·0	33 49·83	...	31 38·6	R
28	5·0	33 49·90	...	31 38·2	R
Mar. 20	6·0	33 50·09	...	31 38·6	M
21	5·3	33 50·04	...	31 38·7	M
247		26 *Monocerotis* γ			
Feb. 19	4·5	7 35 25·20	...	99 16 3·6	R
22	4·6	35 25·17	...	16 3·4	R
Mar. 6	4·7	35 25·00	...	16 3·3	M
22	4·6	35 25·22	...	16 3·6	M
23	4·7	35 25·00	...	16 5·5	M
248		78 *Geminorum* β, *Pollux.*			
Mar. 2	...	7 37 50·91	...	61 40 51·1	R
4	...	37 50·96	...	40 51·6	M

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
249		3 *Puppis.*			
Feb. 20	5·0	7 38 54·57	...	118 39 50·2	R
25	5·0	38 54·67	...	39 52·0	R
Mar. 5	5·4	38 54·74	...	39 51·0	M
7	4·9	38 54·75	...	39 52·0	M
16	5·0	38 54·51	...	39 50·8	M
250		*Taylor* 3214.			
Feb. 16	4·6	7 39 32·74	...	130 38 11·0	R
18	4·5	39 32·60	...	38 12·3	R
28	5·0	39 32·55	...	38 11·6	R
Mar. 9	4·7	39 32·58	...	38 11·2	M
13	4·6	39 32·74	...	38 11·9	M
251		*c Puppis.*			
Feb. 19	5·0	7 40 54·39	...	127 40 24·7	R
21	5·0	40 54·39	...	40 23·6	R
26	5·0	40 54·51	...	40 22·5	R
Mar. 1	5·0	40 54·42	...	40 21·1	R
12	5·0	40 54·47	...	40 24·7	M
252		*o Puppis.*			
Feb. 22	5·0	7 43 0·83	...	115 38 7·3	R
27	5·0	43 0·89	...	38 5·8	R
Mar. 14	5·4	43 0·69	...	38 7·1	M
15	5·0	43 0·77	...	38 7·0	M
21	5·0	43 0·90	...	38 5·9	M
253		ζ *Volantis.*			
Mar. 26	6·9	7 43 18·61	5	162 18 48·6	M
28	6·9	43 18·44	...	18 51·3	M
29	6·0	43 18·63	...	18 50·1	M
254		*Taylor* 3279.			
Feb. 16	4·5	7 45 31·15	...	136 3 58·0	R
18	4·5	45 31·29	...	4 1·0	R
Mar. 8	4·4	45 31·41	...	3 57·8	M

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
255		*9 Puppis.*			
Feb. 20	5·0	7 46 7·24	...	103 34 30·3	R
21	5·0	46 7·29	...	34 31·4	R
Mar. 27	5·3	46 7·32	...	34 32·4	M
Apl. 1	5·2	46 7·32	...	34 31·2	M
256		*R. P. L.* 49.			
Mar. 2	...	7 47 30·15	3	5 35 39·5	R
		R. P. L. 49,—*s.p.*			
Aug. 26	...	7 47 28·19	3	5 35 39·3	R
Sep. 3	...	47 29·02	3	35 39·3	R
257		*Taylor* 3297.			
Feb. 22	5·0	7 47 42·25	...	124 23 57·5	R
25	5·0	47 42·31	...	23 57·4	R
Mar. 1	5·0	47 42·39	...	23 57·9	R
18	5·0	47 42·28	...	23 56·9	M
19	5·4	47 42·49	...	23 58·7	M
258		*a Puppis.*			
Mar. 25	5·0	7 48 1·42	...	130 15 44·3	M
30	5·1	48 1·48	...	15 43·5	M
Apl. 2	5·0	48 1·21	...	15 43·9	M
4	5·0	48 1·49	...	15 44·4	R
259		*b Puppis.*			
Feb. 19	5·0	7 48 19·42	...	128 32 52·6	R
26	5·0	48 19·50	...	32 53·2	R
Mar. 23	5·0	48 19·39	...	32 52·7	M
Apl. 3	5·0	48 19·58	4	32 51·6	R
260		*Taylor* 3317.			
Feb. 27	5·0	7 49 37·21	...	139 17 46·9	R
28	5·0	49 37·23	...	17 48·4	R
Mar. 4	5·0	49 37·26	...	17 46·8	M
6	5·2	49 37·23	...	17 46·8	M
13	5·0	49 37·32	...	17 46·0	M

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
261		*B. F.* 1129.			
Feb. 18	5·0	7 54 23·75	...	108 3 55·7	R
27	5·0	54 23·93	...	3 55·0	R
Mar. 1	5·0	54 23·90	...	3 55·4	R
5	5·5	54 23·95	6	3 54·9	M
7	5·3	54 23·88	...	3 56·0	M
262		*Taylor* 3362.			
Feb. 21	5·0	7 54 43·76	...	138 54 49·9	R
25	5·0	54 43·86	...	54 49·4	R
Mar. 14	5·0	54 43·78	...	54 50·3	M
15	5·0	54 43·81	...	54 51·1	M
16	5·0	54 43·88	...	54 51·5	M
263		*6 Cancri.*			
Feb. 19	...	7 56 1·35	...	61 51 55·2	R
20	...	56 1·33	...	51 55·0	R
22	...	56 1·39	...	51 52·9	R
26	...	56 1·28	...	51 53·7	R
28	...	56 1·35	...	51 54·1	R
Mar. 9	...	56 1·48	...	51 54·8	M
11	...	56 1·44	...	51 56·2	M
12	...	56 1·33	...	51 54·9	M
21	...	56 1·45	...	51 55·9	M
22	...	56 1·32	...	51 55·9	M
264		*15 Argus* ι			
Feb. 25	...	8 2 20·99	...	113 57 12·2	R
28	...	2 20·89	...	57 11·6	R
Mar. 4	...	2 20·81	...	57 12·1	M
8	...	2 20·87	...	57 12·0	M
265		*29 Monocerotis.*			
Mar. 20	...	8 2 27·65	...	92 37 46·0	M
22	...	2 27·66	...	37 46·1	M
Apl. 1	...	2 27·65	...	37 47·6	M
3	...	2 27·76	...	37 45·1	R
4	...	2 27·92	...	37 46·2	R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
266		16 *Puppis.*			
Feb. 16	5·0	8 3 34·82	...	108 53 17·3	R
21	5·0	3 34·82	...	53 15·4	R
27	5·0	3 34·78	...	53 17·8	R
Mar. 1	5·0	3 34·70	...	53 17·1	R
6	5·2	3 34·83	...	53 18·5	M
267		γ *Argûs*—1*st.*			
Feb. 22	5·0	8 5 43·80	...	136 59 15·6	R
26	5·0	5 43·97	...	59 10·6	R
Mar. 2	5·0	5 43·79	...	59 11·3	R
9	5·0	5 43·75	...	59 10·5	M
11	5·2	5 43·69	...	59 11·7	M
268		*Taylor* 3478.			
Mar. 27	5·7	8 6 42·96	...	145 43 35·2	M
28	5·8	6 43·10	...	43 34·5	M
269		*Taylor* 3484.			
Mar. 23	5·4	8 6 59·20	...	150 55 57·7	M
25	5·6	6 59·17	...	55 55·8	M
Apl. 2	5·4	6 59·13	...	55 56·6	M
270		h^1 *Puppis*			
Mar. 19	5·7	8 7 0·06	...	129 15 20·5	M
30	5·4	7 0·07	...	15 20·2	M
271		*Taylor* 3480.			
Mar. 21	5·4	8 7 18·72	...	132 37 26·7	M
26	5·3	7 18·55	...	37 23·5	M
272		ϵ *Volantis.*			
Mar. 12	5·2	8 7 31·69	...	158 15 33·8	M
16	5·0	7 31·80	...	15 32·7	M
Apl. 4	5·0	7 31·63	...	15 32·4	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
273		20 *Puppis.*			
Feb. 20	5·0	8 7 43·48	...	105 25 18·7	R
28	5·0	7 43·52	...	25 17·4	R
Mar. 13	5·3	7 43·30	...	25 16·9	M
15	5·0	7 43·35	...	25 17·4	M
18	5·2	7 43·50	...	25 17·7	M
274		*r Puppis.*			
Feb. 16	5·0	8 8 53·29	...	125 31 53·8	R
19	5·0	8 53·20	...	31 55·0	R
27	5·0	8 53·17	...	31 52·4	R
Mar. 7	4·9	8 53·39	...	31 55·7	M
Apl. 3	5·0	8 53·35	...	31 54·1	R
275		17 *Cancri* β			
Feb. 18	4·0	8 9 53·74	...	80 26 23·5	R
21	4·0	9 53·67	...	26 22·2	R
25	4·0	9 53·68	...	26 22·9	R
Mar. 5	4·2	9 53·91	...	26 22·6	M
8	4·0	9 53·96	...	26 22·9	M
276		30 *Lyncis.*			
Mar. 29	5·8	8 10 34·13	...	31 52 41·4	M
277		*Lacaille* 3275.			
Mar. 22	5·7	8 13 25·19	...	152 32 23·3	M
30	5·8	13 24·97	...	32 24·2	M
278		*q Puppis.*			
Feb. 19	5·0	8 13 59·56	...	126 16 55·4	R
20	5·0	13 59·49	...	16 54·0	R
22	5·0	13 59·59	...	16 54·9	R
Mar. 2	5·0	13 59·30	...	16 55·9	R
4	5·0	13 59·28	...	16 56·4	M
279		31 *Lyncis.*			
Apl. 1	5·2	8 14 28·81	...	46 25 19·6	M

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
280		*Radcliffe* 2130.			
Apl. 3	5·0	8 14 33·84	...	36 23 19·4	R
281		*w Puppis.*			
Feb. 16	5·0	8 16 34·70	...	122 40 1·4	R
18	5·0	16 34·54	...	40 2·4	R
25	5·0	16 34·69	...	40 2·1	R
Mar. 1	5·0	16 34·83	...	40 0·7	R
9	5·0	16 34·69	...	40 3·0	M
282		*Lacaille* 3308.			
Feb. 19	5·0	8 18 46·28	...	138 5 58·0	R
21	5·0	18 46·31	...	5 57·8	R
26	5·0	18 46·49	...	5 56·4	R
Mar. 2	5·0	18 46·46	...	5 54·5	R
5	6·0	18 46·56	...	5 58·2	M
283		*Taylor* 3582.			
Mar. 21	5·5	8 19 33·87	...	93 30 34·8	M
25	5·7	19 33·91	...	30 35·2	M
Apl. 2	5·6	19 33·86	...	30 35·0	M
284		*Taylor* 3589.			
Mar. 19	6·3	8 19 47·71	...	118 39 4·9	M
26	5·7	19 47·82	...	39 5·2	M
Apl. 6	6·0	19 47·74	...	39 2·9	R
285		*Taylor* 3590.			
Mar. 27	9·3	8 19 50·75	...	113 39 2·5	M
28	9·2	19 50·76	...	39 2·2	M
Apl. 4	9·1	19 50·98	...	39 0·1	R
8	9·1	19 50·76	...	39 1·3	R
10	9·2	19 50·77	...	39 1·5	R
286		1 *Ursæ Majoris o*			
Feb. 20	...	8 20 6·83	...	28 52 31·9	R
22	...	20 6·93	...	52 33·6	R
Mar. 7	...	20 7·08	...	52 33·8	M
8	...	20 7·09	...	52 32·4	M
11	...	20 7·05	...	52 33·9	M
287		2 *Ursæ Majoris* A.			
Mar. 29	5·8	8 23 40·22	...	24 26 26·5	M
Apl. 3	5·0	23 40·13	...	26 25·6	R
288		*β Volantis.*			
Feb. 16	5·0	8 24 24·34	...	155 43 48·9	R
18	5·0	24 24·33	...	43 47·3	R
21	5·0	24 24·41	...	43 46·8	R
Mar. 6	5·0	24 24·49	...	43 49·6	M
12	5·0	24 24·27	...	43 48·1	M
289		33 *Cancri η*			
Feb. 27	...	8 25 39·07	...	69 8 43·7	R
Mar. 1	...	25 39·12	...	8 43·5	R
4	...	25 39·16	...	8 44·6	M
13	...	25 39·03	...	8 44·2	M
14	...	25 39·08	...	8 44·8	M
15	...	25 39·12	...	8 45·2	M
18	...	25 39·12	...	8 44·9	M
20	...	25 39·06	...	8 45·5	M
23	...	25 39·17	...	8 45·6	M
Apl. 6	...	25 39·08	...	8 44·5	R
290		4 *Ursæ Majoris* π^2			
Mar. 22	5·0	8 29 32·12	...	25 14 52·5	M
25	5·0	29 32·05	...	14 51·2	M
Apl. 1	5·5	29 31·92	...	14 53·1	M
3	5·0	29 31·95	...	14 50·3	R
8	5·0	29 31·96	...	14 50·5	R
291		*Taylor* 3702.			
Mar. 19	5·5	8 31 0·18	...	139 31 28·3	M
21	5·5	31 0·10	...	31 28·6	M
Apl. 4	5·5	31 0·34	...	31 28·3	R
292		4 *Hydræ δ*			
Feb. 16	4·0	8 31 11·68	...	83 52 17·6	R
19	4·0	31 11·84	...	52 17·7	R
22	4·0	31 11·81	...	52 18·6	R
Mar. 5	4·5	31 11·66	...	52 18·1	M
9	4·2	31 11·77	...	52 19·4	M

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
293		*Taylor* 3717.			
Mar. 26	5·5	8 32 13·62	...	140 32 49·5	M
30	5·8	32 13·51	...	32 49·3	M
294		*e Velorum.*			
Feb. 18	5·0	8 33 21·15	...	132 33 47·5	R
20	5·0	33 21·24	...	33 45·0	R
25	5·0	33 21·31	...	33 46·0	R
Mar. 8	5·0	33 21·39	...	33 47·5	M
18	5·0	33 21·14	...	33 45·9	M
295		*f Mali.*			
Mar. 23	5·3	8 34 38·67	...	119 7 40·4	M
Apl. 2	5·7	34 38·77	...	7 40·3	M
6	5·5	34 38·71	...	7 42·4	R
11	5·5	34 38·61	...	7 37·8	R
15	5·5	34 38·60	...	7 38·6	R
296		*Taylor* 3742.			
Apl. 12	6·0	8 35 16·80	...	142 39 39·8	R
297		*b Mali.*			
Feb. 16	5·0	8 35 19·66	...	124 52 34·8	R
19	5·0	35 19·81	...	52 34·6	R
21	5·0	35 19·64	...	52 32·4	R
Mar. 6	5·0	35 19·76	...	52 35·6	M
11	5·2	35 19·60	...	52 34·6	M
298		*d Carinæ.*			
Mar. 27	5·0	8 37 55·21	...	149 19 34·1	M
28	5·0	37 55·14	...	19 34·8	M
Apl. 4	5·0	37 55·26	...	19 34·5	R
8	5·0	37 55·05	...	19 34·6	R
10	5·0	37 55·10	...	19 34·0	R
299		*a Mali.*			
Mar. 7	4·4	8 38 41·52	...	122 44 52·1	M
12	4·4	38 41·33	...	44 50·8	M
13	4·6	38 41·42	...	44 49·9	M
Apl. 3	4·3	38 41·51	...	44 49·6	R
15	4·5	38 41·36	...	44 50·9	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
300		48 *Canceri* ι			
Mar. 29	...	8 39 18·86	...	60 47 41·2	M
301		11 *Hydræ* ϵ			
Mar. 5	...	8 40 18·78	...	83 8 3·3	M
9	...	40 18·70	...	8 2·5	M
16	...	40 18·72	...	8 2·7	M
302		*a Velorum.*			
Mar. 19	5·2	8 41 53·52	...	135 35 47·2	M
21	5·0	41 53·50	...	35 45·9	M
Apl. 5	5·0	41 53·56	...	35 46·4	R
6	5·0	41 53·41	...	35 47·4	R
9	5·0	41 53·35	...	35 45·5	R
303		13 *Hydræ* ρ			
Mar. 22	...	8 41 57·95	...	83 42 43·9	M
Apl. 11	...	41 58·12	...	42 43·2	R
304		14 *Hydræ.*			
Mar. 30	5·7	8 43 13·93	...	92 59 29·6	M
Apl. 10	5·5	43 13·89	...	59 29·5	R
12	5·5	43 13·87	...	59 29·5	R
15	5·5	43 14·08	...	59 29·4	R
305		*f Carinæ.*			
Mar. 8	5·0	8 43 33·49	...	146 19 18·7	M
14	5·0	43 33·25	...	19 18·8	M
15	5·0	43 33·27	...	19 18·3	M
Apl. 1	5·4	43 33·17	...	19 18·6	M
8	5·0	43 33·34	...	19 18·7	R
306		*g Velorum.*			
Mar. 23	5·7	8 45 34·53	...	134 51 17·7	M
25	5·4	45 34·37	...	51 16·7	M
Apl. 2	5·6	45 34·52	...	51 18·2	M
3	5·5	45 34·66	...	51 15·1	R
4	5·5	45 34·65	...	51 16·1	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
307		16 *Hydræ* ζ			
Mar. 19	...	8 48 56·74	...	83 35 27·1	M
26	...	48 56·66	...	35 27·4	M
Apl. 4	...	48 56·86	...	35 26·7	R
5	...	48 56·89	...	35 26·4	R
6	...	48 56·82	...	35 26·3	R
308		*R. P. L.* 60.			
Mar. 16	...	8 49 35·06	3	5 20 0·7	M
309		8 *Ursæ Majoris* ρ			
Apl. 11	5·0	8 51 30·97	...	21 53 46·3	R
12	5·0	51 31·00	...	53 47·6	R
15	5·0	51 31·13	...	53 47·4	R
310		*e Carinæ.*			
Mar. 21	5·4	8 52 17·17	...	150 10 43·9	M
27	5·0	52 16·97	...	10 44·0	M
Apl. 3	5·5	52 17·19	...	10 42·9	R
5	5·5	52 17·07	...	10 41·7	R
8	5·5	52 17·27	...	10 43·1	R
9	5·5	52 16·99	...	10 43·5	R
311		12 *Ursæ Majoris* κ			
Mar. 23	4·3	8 55 17·25	...	42 21 44·5	M
28	4·4	55 17·43	...	21 43·5	M
Apl. 1	4·4	55 17·42	...	21 44·3	M
4	4·0	55 17·34	...	21 42·2	R
6	4·0	55 17·31	...	21 42·6	R
312		11 *Ursæ Majoris* σ^1			
Apl. 11	5·0	8 57 39·25	...	22 38 17·6	R
12	5·0	57 39·33	...	38 18·1	R
15	5·0	57 39·39	...	38 18·4	R
313		*Radcliffe* 2271.			
Mar. 26	5·0	8 58 45·94	...	51 3 40·3	M
30	5·4	58 45·98	...	3 39·8	M
Apl. 5	5·0	58 46·07	...	3 39·5	R
8	5·0	58 45·71	...	3 40·7	R
9	5·0	58 45·80	...	3 39·8	R
314		13 *Ursæ Majoris* σ^2			
Mar. 29	5·0	8 59 38·80	...	22 22 17·4	M
315		*e Velorum.*			
Mar. 6	5·1	8 59 56·85	...	136 36 46·5	M
7	5·0	59 56·84	...	36 46·8	M
8	5·0	59 56·92	...	36 46·8	M
Apl. 3	5·0	59 57·01	...	36 45·7	R
10	5·0	59 56·87	...	36 48·0	R
316		14 *Ursæ Majoris* τ			
Apl. 6	5·0	9 0 50·43	...	25 59 28·7	R
317		*Taylor* 3991.			
Mar. 22	5·4	9 2 41·46	...	115 22 1·8	M
25	5·7	2 41·61	...	22 1·5	M
318		*E Carinæ.*			
Apl. 4	5·5	9 4 38·26	...	160 2 55·4	R
8	5·5	4 38·12	...	2 55·3	R
12	5·5	4 38·09	...	2 53·5	R
319		16 *Ursæ Majoris* ε.			
Mar. 19	5·9	9 4 40·95	...	28 4 30·7	M
21	5·2	4 41·07	...	4 32·1	M
Apl. 2	5·4	4 41·01	...	4 32·4	M
9	5·0	4 40·90	...	4 31·4	R
11	5·0	4 40·95	...	4 32·3	R
320		*e Mali.*			
Apl. 5	5·6	9 4 46·45	...	119 52 5·7	R
15	5·5	4 46·45	...	52 4·1	R
17	5·5	4 46·39	...	52 4·4	R
321		18 *Ursæ Majoris* ε			
Mar. 28	5·2	9 7 24·33	...	35 28 32·0	M
Apl. 1	5·4	7 24·18	...	28 32·8	M
6	5·0	7 24·15	...	28 31·5	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
322		*a Carinæ.*			
Mar. 9	5·0	9 7 45·44	...	148 28 4·6	M
11	5·0	7 45·25	...	28 4·1	M
12	4·9	7 45·46	...	28 2·4	M
Apl. 3	5·0	7 45·29	...	28 4·0	R
10	5·0	7 45·32	...	28 3·9	R
323		*l Velorum.*			
Apl. 5	5·0	9 10 48·42	...	128 3 43·6	R
24	5·0	10 48·59	...	3 43·0	R
324		*k^2 Velorum.*			
Apl. 4	5·5	9 10 52·41	...	126 54 19·0	R
12	5·5	10 52·28	...	54 19·1	R
325		83 *Cancri.*			
Mar. 5	...	9 12 10·30	...	71 46 42·8	M
14	...	12 10·33	...	46 43·7	M
15	...	12 10·26	...	46 43·9	M
16	...	12 10·29	...	46 43·3	M
18	...	12 10·23	...	46 43·7	M
Apl. 15	...	12 10·13	...	46 42·7	R
326		*g Carinæ.*			
Mar. 25	5·4	9 12 45·40	...	147 1 52·8	M
27	5·2	12 45·34	...	1 52·9	M
Apl. 11	5·5	12 45·49	...	1 52·7	R
327		26 *Hydræ.*			
Mar. 22	5·5	9 13 53·90	...	101 27 38·0	M
30	5·3	13 53·92	...	27 37·9	M
Apl. 3	5·5	13 54·01	...	27 37·3	R
6	5·5	13 53·85	...	27 37·1	R
8	5·5	13 53·85	...	27 36·8	R
9	5·5	13 54·05	...	27 36·1	R
328		27 *Hydræ.*			
Mar. 21	5·6	9 14 31·48	...	99 2 19·1	M
Apl. 10	5·2	14 31·62	...	2 19·5	R
17	5·0	14 31·63	...	2 21·9	R
22	5·5	14 31·70	...	2 18·6	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
329		*h Mali.*			
Mar. 11	5·0	9 16 5·40	...	115 26 49·1	M
12	5·0	16 5·51	...	26 49·2	M
13	5·2	16 5·33	...	26 49·0	M
Apl. 5	5·0	16 5·41	...	26 47·8	R
12	5·0	16 5·34	...	26 49·3	R
330		1 *Leonis κ*			
Apl. 4	5·0	9 17 32·91	...	63 17 34·1	R
6	5·0	17 32·84	...	17 33·8	R
331		*k Carinæ.*			
Mar. 26	5·3	9 18 1·15	...	151 53 8·2	M
29	5·4	18 0·84	...	53 8·8	M
Apl. 2	5·3	18 0·88	...	53 8·7	M
8	5·5	18 0·91	...	53 7·8	R
332		30 *Hydræ α, Var.* 2.			
Mar. 8	...	9 21 35·50	...	98 7 49·6	M
20	...	21 35·48	...	7 48·8	M
Apl. 1	...	21 35·44	...	7 50·2	M
3	...	21 35·48	...	7 47·9	R
333		*Argelander* 196.			
Apl. 5	5·0	9 21 44·49	...	95 32 19·6	R
12	5·0	21 44·28	...	32 20·6	R
15	5·0	21 44·34	...	32 20·6	R
334		23 *Ursæ Majoris h.*			
Mar. 23	4·2	9 21 53·97	...	26 24 22·0	M
28	4·0	21 53·95	...	24 23·6	M
Apl. 9	4·0	21 53·82	...	24 21·6	R
10	4·0	21 53·84	...	24 22·9	R
11	4·0	21 53·90	...	24 22·7	R
335		31 *Hydræ* τ^1			
Apl. 22	...	9 22 57·19	...	92 14 ~~9·5~~ 5·1	R
26	...	22 57·31	...	14 4·1	R
30	...	22 57·32	...	14 ~~5·6~~	R

9·0
8·0
9·5
9·8

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
336		*n Carinæ.*			
Mar. 22	6·0	9 24 5·~~06~~	...	154 24 6·4	M
25	5·6	24 5·~~17~~	...	24 6·2	M
Apl. 6	5·0	24 5·~~11~~	...	24 5·7	R
27	5·0	24 5·~~17~~	...	24 5·0	R
29	5·0	24 5·~~17~~	...	24 4·8	R
337		*ϵ Antliæ.*			
Mar. 6	5·5	9 24 12·65	...	125 25 6·3	M
7	5·4	24 12·62	...	25 7·0	M
14	5·4	24 12·48	...	25 5·2	M
Apl. 8	5·5	24 12·64	...	25 7·6	R
338		*ζ¹ Antliæ—1st.*			
Mar. 21	6·2	9 25 32·27	...	121 21 17·8	M
30	6·4	25 32·53	...	21 16·6	M
Apl. 17	6·0	25 32·36	...	21 18·7	R
339		*ζ¹ Antliæ—2nd.*			
Mar. 27	6·0	9 25 32·82	...	121 21 11·3	M
340		*ζ² Antliæ.*			
Apl. 4	6·0	9 26 19·24	...	121 20 5·1	R
10	6·0	26 18·99	...	20 8·1	R
12	6·0	26 19·02	...	20 7·0	R
341		10 *Leonis Minoris.*			
Apl. 11	5·0	9 26 44·61	...	53 3 39·9	R
15	5·0	26 44·60	...	3 39·0	R
24	5·0	26 44·69	...	3 39·8	R
342		*Taylor* 4218.			
Apl. 5	5·0	9 27 30·88	...	146 29 48·7	R
343		*Lacaille* 3917.			
Mar. 29	5·4	9. 29 ~~21·67~~	...	138 27 50·3	M
Apl. 3	5·5	29 21·93	...	27 ~~50·0~~ 48·3	R
8	5·5	29 ~~21·67~~	...	27 49·5	R
9	5·5	29 21·80	...	27 49·2	R
22	5·5	29 21·74	...	27 50·2	R
344		*Taylor* 4233.			
Apl. 26	5·5	9 29 54·92	...	140 42 44·3	R
27	5·5	29 54·94	...	42 44·0	R
345		*h Carinæ.*			
Mar. 9	5·0	9 30 54·24	...	148 41 10·2	M
15	5·0	30 54·22	...	41 10·4	M
16	5·0	30 54·12	...	41 7·8	M
Apl. 6	5·0	30 54·14	...	41 9·4	R
12	5·0	30 54·20	...	41 7·6	R
346		*y Velorum.*			
Apl. 4	5·5	9 33 15·52	...	132 38 26·6	R
10	5·5	33 15·64	...	38 27·9	R
15	5·5	33 15·61	...	38 26·3	R
347		35 *Hydræ ι*			
Apl. 5	...	9 33 37·77	...	90 35 22·0	R
11	...	33 37·48	...	35 22·1	R
17	...	33 37·50	...	35 23·9	R
348		38 *Hydræ κ*			
Apl. 24	5·0	9 34 27·28	...	103 46 46·8	R
30	5·0	34 27·53	...	46 44·8	R
349		*m Carinæ.*			
Mar. 25	5·0	9 35 58·44	...	150 46 33·8	M
26	5·0	35 58·50	...	46 34·4	M
Apl. 1	5·3	35 58·26	...	46 35·8	M
2	5·0	35 58·18	...	46 35·2	M
8	5·0	35 58·27	...	46 34·6	R
350		28 *Ursæ Majoris.*			
Mar. 28	5·5	9 36 31·51	...	25 47 10·5	M
Apl. 3	5·0	36 31·39	...	47 11·9	R
22	5·0	36 31·26	...	47 9·5	R
26	5·0	36 31·37	...	47 8·4	R
29	5·0	36 31·53	...	47 9·3	R

5·12
·23
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·22
21
5·19

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Number and Date.	Magnitude.	Mean Right Ascension. 1878. h. m. s.	No. of Wires.	Mean Polar Distance. 1878. ° ′ ″	Observer.
351		*θ Antliæ.*			
Mar. 8	5·6	9 38 45·93	...	117 12 41·7	M
18	5·4	38 45·94	...	12 40·8	M
Apl. 5	5·0	38 46·20	...	12 40·8	R
6	5·0	38 46·16	...	12 41·1	R
10	5·5	38 45·91	...	12 43·1	R
352		17 *Leonis* ϵ			
Mar. 6	...	9 38 55·45	...	65 39 52·5	M
7	...	38 55·40	...	39 54·1	M
19	...	38 55·58	...	39 52·4	M
Apl. 4	...	38 55·49	...	39 52·7	R
9	...	38 55·46	...	39 52·1	R
12	...	38 55·46	...	39 52·9	R
27	...	38 55·42	...	39 52·8	R
353		29 *Ursæ Majoris* υ			
Mar. 21	4·0	9 42 18·37	...	30 23 17·9	M
27	4·4	42 18·42	...	23 19·0	M
Apl. 8	4·0	42 18·25	...	23 18·7	R
11	4·0	42 18·29	...	23 17·6	R
15	4·0	42 18·33	...	23 17·9	R
354		30 *Ursæ Majoris* ϕ			
Mar. 30	...	9 43 47·76	...	35 21 59·0	M
Apl. 24	...	43 47·58	...	21 57·2	R
25	...	43 47·59	...	21 58·2	R
26	...	43 47·66	...	21 58·1	R
29	...	43 47·64	...	21 59·2	R
355		39 *Hydræ* υ[1]			
Mar. 9	...	9 45 36·48	...	104 16 29·2	M
11	...	45 36·46	...	16 29·2	M
12	...	45 36·45	...	16 28·1	M
Apl. 3	...	45 36·67	...	16 27·9	R
4	...	45 36·52	...	16 28·7	R
356		*R. P. L.* 70.			
Mar. 23	...	9 48 47·40	3	5 29 42·5	M
28	...	48 47·74	3	29 41·5	M
Apl. 2	...	9 48 48·47	3	5 29 42·7	M
6	...	48 48·22	3	29 42·2	R
10	...	48 48·16	3	29 43·7	R
22	...	48 47·81	3	29 41·9	R
27	...	48 47·78	3	29 42·0	R
		R. P. L. 70—*s.p.*			
Sep. 24	...	9 48 47·82	3	5 29 42·2	R
357		*η Antliæ.*			
Mar. 8	6·0	9 53 38·40	...	125 18 27·1	M
9	6·0	53 38·17	..	18 29·0	M
13	6·0	53 38·16	...	18 26·2	M
Apl. 4	6·0	53 38·45	...	18 26·7	R
5	6·0	53 38·38	...	18 26·1	R
358		29 *Leonis* π			
Mar. 6	...	9 53 45·95	...	81 22 14·1	M
7	...	53 45·88	...	22 14·8	M
14	...	53 45·79	...	22 14·1	M
15	...	53 45·82	...	22 15·1	M
25	...	53 45·82	...	22 14·5	M
26	...	53 45·94	...	22 15·1	M
27	...	53 45·93	...	22 15·1	M
30	...	53 45·93	...	22 14·8	M
Apl. 1	...	53 45·98	...	22 15·7	M
3	...	53 45·81	...	22 13·3	R
8	...	53 45·90	...	22 13·9	R
11	...	53 45·96	...	22 12·0	R
15	...	53 45·97	...	22 12·6	R
17	...	53 45·94	...	22 14·1	R
24	...	53 45·95	...	22 13·9	R
25	...	53 45·92	...	22 13·7	R
29	...	53 45·93	...	22 14·0	R
359		21 *Leonis Minoris.*			
Mar. 21	5·0	10 0 13·90	...	54 9 43·1	M
22	5·0	0 13·82	...	9 40·7	M
Apl. 2	5·4	0 13·92	...	9 41·1	M
6	5·0	0 13·77	...	9 40·7	R
8	5·0	0 13·80	...	9 41·0	R
9	5·0	0 13·81	...	9 41·6	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
360		15 *Sextantis.*			
Mar. 23	...	10 1 41·77	...	89 46 33·1	M
29	...	1 41·68	...	46 33·1	M
Apl. 1	...	1 41·66	...	46 33·2	M
3	...	1 41·86	...	46 31·6	R
5	...	1 41·77	...	46 31·9	R
361		32 *Leonis α, Regulus.*			
Mar. 16	...	10 1 52·43	...	77 26 14·3	M
19	...	1 52·38	...	26 15·3	M
Apl. 10	...	1 52·43	...	26 11·8	R
15	...	1 52·41	...	26 11·1	R
17	...	1 52·34	...	26 12·4	R
22	...	1 52·44	...	26 12·8	R
26	...	1 52·38	...	26 12·5	R
30	...	1 52·39	...	26 13·7	R
362		*Rumker* 193.			
Mar. 11	8·0	10 3 8·62	...	150 37 8·6	M
12	8·1	3 8·79	...	37 7·5	M
13	8·0	3 8·66	...	37 8·8	M
Apl. 4	8·0	3 8·78	...	37 7·9	R
11	8·0	3 8·81	...	37 7·3	R
363		*Taylor* 4522.			
Mar. 25	5·4	10 4 18·76	...	141 12 48·2	M
26	5·4	4 18·83	...	12 49·5	M
Apl. 24	5·5	4 18·60	...	12 45·8	R
27	5·0	4 18·67	...	12 46·4	R
May 1	5·5	4 18·82	...	12 46·5	R
364		41 *Hydræ* λ			
Mar. 27	...	10 4 38·22	...	101 45 6·5	M
28	...	4 38·19	...	45 6·3	M
Apl. 12	...	4 38·47	...	45 5·2	R
25	...	4 38·24	...	45 6·1	R
29	...	4 38·21	..	45 6·2	R
365		*Taylor* 4559.			
Mar. 9	5·4	10 8 40·26	...	140 37 42·7	M
14	5·5	8 40·36	...	37 41·6	M
15	5·3	8 40·25	...	37 43·2	M
Apl. 5	5·5	8 40·42	...	37 41·6	R
6	5·5	8 40·40	...	37 42·0	R
366		32 *Ursæ Majoris.*			
Apl. 3	...	10 9 ~~8·94~~ 9·68	...	24 16 57·4	R
8	...	9 8·95	...	17 0·9	R
9	...	9 9·16	...	17 0·3	R
May 8	...	9 8·95	...	16 58·9	R
367		33 *Ursæ Majoris* λ			
Apl. 15	3·5	10 9 43·78	...	46 28 36·5	R
17	3·5	9 43·73	...	28 39·0	R
22	3·5	9 43·79	...	28 36·4	R
368		36 *Leonis* ζ			
Apl. 10	4·5	10 9 54·02	...	65 58 30·8	R
11	4·5	9 54·01	...	58 30·1	R
12	4·5	9 54·00	...	58 31·4	R
May 1	4·5	9 54·22	...	58 29·2	R
4	4·5	9 54·11	...	58 29·3	R
369		*Lacaille* 4233.			
Mar. 30	5·7	10 10 3·42	...	155 46 5·7	M
Apl. 24	5·5	10 3·27	...	46 5·3	R
26	5·5	10 3·34	...	46 4·4	R
27	5·5	10 3·38	...	46 4·5	R
30	5·5	10 3·37	...	46 4·8	R
370		*R. P. L.* 72.—*s.p.*			
Oct. 8	...	10 11 39·07	3	5 7 50·2	C.R
22	...	11 39·30	3	7 50·2	C.R
Nov. 15	...	11 39·30	3	7 52·3	M

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
371		*q Carinæ.*			
Mar. 12	5·0	10 13 0·78	...	150 43 23·5	M
13	4·9	13 0·65	...	43 23·5	M
16	5·0	13 0·80	...	43 24·5	M
Apl. 25	5·0	13 0·65	...	43 23·7	R
29	5·0	13 0·66	...	43 20·8	R
372		41 *Leonis* γ^1			
Apl. 4	...	10 13 14·63	...	69 32 29·1	R
373		*Taylor* 4616.			
Mar. 29	5·0	10 15 1·63	...	144 25 0·8	M
Apl. 5	5·0	15 1·80	...	24 59·6	R
6	5·0	15 1·78	...	24 59·9	R
9	5·0	15 1·86	...	24 59·8	R
12	5·0	15 1·86	...	25 0·1	R
374		*Radcliffe* 2485.			
Apl. 10	5·0	10 15 18·58	...	23 49 2·1	R
22	5·0	15 18·79	...	49 2·7	R
May 8	5·0	15 18·62	...	49 1·5	R
10	5·0	15 18·63	...	49 1·5	R
11	5·0	15 18·74	...	49 1·3	R
375		*Taylor* 4634.			
Mar. 26	5·0	10 16 22·48	...	144 25 46·8	M
Apl. 3	5·0	16 22·60	...	25 43·3	R
17	5·0	16 22·35	...	25 45·3	R
27	5·0	16 22·35	...	25 43·3	R
May 1	5·0	16 22·40	...	25 44·9	R
376		*Lacaille* 4270.			
Mar. 27	9·0	10 16 26·24	...	141 6 2·3	M
Apl. 8	8·9	16 26·20	...	6 1·7	R
11	8·9	16 26·17	...	6 1·0	R
24	8·9	16 26·33	...	6 0·2	R
26	8·9	16 26·35	...	6 0·5	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
377		*r Velorum.*			
Apl. 30	5·0	10 17 5·79	...	131 2 11·2	R
May 6	5·0	17 5·81	...	2 10·8	R
16	5·2	17 5·77	...	2 11·7	M
17	5·5	17 5·58	...	2 14·2	M
20	5·5	17 5·67	...	2 12·7	M
378		*γ Antliæ.*			
Apl. 29	5·5	10 18 19·00	...	119 1 53·5	R
379		30 *Leonis Minoris.*			
May 4	4·5	10 18 54·90	...	55 34 59·0	R
380		*Lacaille* 4296.			
Apl. 25	5·5	10 19 21·12	...	156 17 5·4	R
381		31 *Leonis Minoris* β			
Apl. 9	4·5	10 20 49·48	...	52 40 4·6	R
15	...	20 49·51	3	40 6·3	R
May 11	4·5	20 49·32	...	40 4·4	R
382		*α Antliæ.*			
Apl. 1	4·7	10 21 34·11	...	120 26 51·5	M
4	4·5	21 34·28	...	26 49·2	R
5	4·5	21 34·16	...	26 48·6	R
May 1	4·5	21 34·24	...	26 49·0	R
6	4·5	21 34·22	...	26 48·2	R
383		36 *Ursæ Majoris.*			
Apl. 12	5·0	10 22 48·51	...	33 23 39·2	R
26	5·0	22 48·32	...	23 39·3	R
May 10	5·0	22 48·45	...	23 38·8	R
384		*Taylor* 4694.			
Apl. 17	5·0	10 22 51·65	...	147 1 2·6	R
30	5·0	22 51·70	...	1 1·1	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
385	*s Carinæ.*				
Apl. 3	5·0	10 23 24·27	...	148 7 0·2	R
386	*Brisbane* 3024.				
Apl. 24	5·0	10 23 34·36	...	155 4 57·0	R
29	5·0	23 34·39	...	4 58·3	R
387	*Taylor* 4760.				
May 22	5·9	10 23 50·98	...	119 2 24·2	M
388	*δ Antliæ.*				
Mar. 21	5·8	10 23 58·76	...	119 58 59·4	R
389	*Radcliffe* 2510.				
May 4	5·0	10 26 6·30	...	48 56 48·9	R
11	5·0	26 6·31	...	56 49·9	R
20	5·4	26 6·54	...	56 48·9	M
390	47 *Leonis ρ*				
Mar. 11	...	10 26 23·03	...	80 3 55·9	M
Apl. 5	...	26 23·20	...	3 55·8	R
8	...	26 23·22	...	3 56·9	R
9	...	26 23·15	...	3 56·2	R
11	...	26 23·19	...	3 55·3	R
May 1	...	26 23·18	...	3 56·1	R
391	34 *Leonis Minoris.*				
Apl. 25	5·0	10 26 32·18	...	54 22 59·4	R
May 17	5·4	26 32·26	...	22 57·3	M
23	5·9	26 32·24	...	22 58·6	M
392	*Lacaille* 4357.				
Mar. 29	5·8	10 27 15·24	...	161 21 59·0	M
393	37 *Ursæ Majoris.*				
Apl. 4	5·0	10 27 17·45	...	32 17 22·0	R
26	5·0	27 17·28	...	17 19·9	R
May 6	5·0	27 17·47	...	17 19·8	R
8	5·0	27 17·54	...	17 20·6	R
394	*Taylor* 4773.				
Mar. 25	7·3	10 31 10·10	...	147 35 33·6	M
Apl. 3	7·0	31 10·34	...	35 32·0	R
10	7·0	31 10·14	...	35 33·5	R
22	7·0	31 10·29	...	35 35·1	R
24	7·0	31 10·34	...	35 34·5	R
395	t^1 *Carinæ.*				
Apl. 8	5·5	10 31 46·24	...	148 55 51·0	R
11	5·5	31 46·22	...	55 47·7	R
12	5·5	31 46·18	...	55 48·4	R
May 10	5·0	31 46·87	...	55 52·6	R
11	5·5	31 46·34	...	55 51·6	R
396	37 *Leonis Minoris.*				
Apl. 17	4·5	10 31 50·92	...	57 23 25·2	R
25	4·5	31 51·05	...	23 25·0	R
May 4	4·5	31 50·91	...	23 23·3	R
16	4·9	31 51·11	...	23 22·0	M
397	*p Velorum.*				
Mar. 22	5·0	10 32 10·57	...	137 35 32·4	M
30	5·0	32 10·66	...	35 31·8	M
Apl. 1	5·3	32 10·58	...	35 33·2	R
5	5·0	32 10·75	...	35 31·8	R
6	5·0	32 10·68	...	35 32·4	R
398	ϕ^3 *Hydræ.*				
Apl. 27	5·0	10 32 38·18	...	106 14 36·0	R
29	5·0	32 38·07	...	14 36·0	R
399	38 *Ursæ Majoris.*				
Apl. 30	5·0	10 33 36·07	...	23 38 41·4	R
400	t^2 *Carinæ.*				
Apl. 4	5·0	10 34 6·67	...	148 32 54·8	R
26	5·0	34 6·44	...	32 53·1	R
May 1	5·0	34 6·57	...	32 53·3	R
20	5·1	34 6·50	...	32 53·6	M

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
401		*Anon.*			
May 6	9·0	10 35 34·41	...	149 9 57·6	R
402		*Taylor* 4833.			
Apl. 5	5·5	10 37 54·46	...	153 49 43·2	R
12	5·5	37 54·33	...	49 44·4	R
24	5·5	37 54·22	...	49 42·4	R
May 4	5·5	37 54·47	...	49 41·0	R
8	5·5	37 54·39	...	49 39·7	R
403		*Taylor* 4844.			
Mar. 26	5·3	10 38 53·87	...	149 55 36·3	M
Apl. 3	5·5	38 53·78	...	55 36·1	R
8	5·5	38 53·88	...	55 34·8	R
10	5·4	38 53·64	...	55 36·4	R
17	5·5	38 53·74	...	55 33·7	R
404		42 *Leonis Minoris.*			
Mar. 23	...	10 39 4·77	...	58 40 32·3	M
Apl. 11	...	39 4·58	...	40 31·7	R
22	...	39 4·61	...	40 33·3	R
25	...	39 4·59	...	40 33·8	R
27	...	39 4·60	...	40 34·5	R
405		*Taylor* 4873.			
Mar. 21	5·4	10 42 2·21	...	146 6 51·8	M
Apl. 4	5·5	42 2·42	...	6 52·0	R
9	5·5	42 2·32	...	6 51·6	R
29	5·5	42 2·31	...	6 51·1	R
30	5·5	42 2·29	...	6 53·2	R
406		53 *Leonis l.*			
Apl. 2	...	10 42 50·64	...	78 48 33·0	M
5	...	42 50·65	...	48 33·0	R
6	...	42 50·60	...	48 32·9	R
12	...	42 50·57	...	48 32·6	R
24	...	42 50·48	...	48 32·7	R
27	...	42 50·60	...	48 32·4	R
May 1	...	42 50·61	...	48 32·4	R
4	...	42 50·60	...	48 32·8	R
May 6	...	10 42 50·56	...	78 48 30·9	R
10	...	42 50·59	...	48 32·0	R
16	...	42 50·50	...	48 33·6	M
17	...	42 50·65	...	48 31·9	M
20	...	42 50·63	...	48 33·7	M
21	...	42 50·68	...	48 31·6	M
22	...	42 50·73	...	48 31·6	M
23	...	42 50·55	...	48 31·6	M
27	...	42 50·69	...	48 33·4	M
28	...	42 50·54	...	48 33·1	M
407		46 *Leonis Minoris.*			
Mar. 22	...	10 46 29·08	...	55 7 40·1	M
25	...	46 29·17	...	7 39·6	M
Apl. 11	...	46 29·00	...	7 37·0	R
17	...	46 28·97	...	7 38·9	R
25	...	46 29·12	...	7 40·4	R
408		45 *Ursæ Majoris* ω			
Apl. 10	5·0	10 46 57·06	...	46 9 38·4	R
30	5·0	46 56·92	...	9 38·9	R
May 8	5·0	46 56·85	...	9 37·6	R
11	5·0	46 56·90	...	9 37·6	R
15	5·0	46 56·93	...	9 36·7	R
409		b^3 *Hydræ.*			
Mar. 27	5·5	10 47 31·47	...	109 28 56·1	M
28	5·7	47 31·59	...	28 56·4	M
Apl. 9	5·5	47 31·39	...	28 53·8	R
May 6	...	47 31·25	...	28 53·5	R
10	5·5	47 31·38	...	28 54·5	R
410		*u Carinæ.*			
Apl. 22	5·0	10 48 32·23	...	148 12 20·5	R
27	5·0	48 32·24	...	12 19·3	R
29	5·0	48 32·15	...	12 19·1	R
May 1	5·0	48 32·21	...	12 19·3	R
4	5·0	48 32·25	...	12 20·1	R

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411		*54 Leonis.*			
Apl. 4	4·5	10 49 0·46	...	64 36 0·8	R
8	4·4	49 0·33	...	35 58·6	R
12	4·5	49 0·49	...	35 58·0	R
May 16	4·7	49 0·30	...	35 57·4	M
17	4·9	49 0·39	...	35 59·1	M
412		*ι Antliæ.*			
Mar. 26	5·5	10 51 2·13	...	126 28 55·4	M
Apl. 5	5·5	51 2·22	...	28 53·5	R
6	5·5	51 2·16	...	28 54·8	R
24	5·5	51 2·04	...	28 53·8	R
26	5·5	51 2·07	...	28 54·2	R
413		*60 Leonis b.*			
Mar. 21	...	10 55 49·08	...	69 9 58·3	M
23	...	55 48·92	...	9 57·6	M
Apl. 6	...	55 49·01	...	9 56·7	R
8	...	55 49·02	...	9 57·3	R
9	...	55 49·07	...	9 56·8	R
414		*63 Leonis χ*			
Mar. 29	...	10 58 43·37	...	82 0 16·6	M
Apl. 3	...	58 43·48	...	0 15·0	R
5	...	58 43·31	...	0 16·5	R
10	...	58 43·42	...	0 15·3	R
17	...	58 43·42	...	0 15·6	R
25	...	58 43·35	...	0 15·3	R
26	...	58 43·36	...	0 15·3	R
29	...	58 43·37	...	0 14·7	R
30	...	58 43·36	...	0 15·7	R
May 8	...	58 43·28	...	0 15·0	R
11	...	58 43·27	...	0 15·2	R
15	...	58 43·35	...	0 14·1	R
27	...	58 43·31	...	0 15·6	M
28	...	58 43·36	...	0 14·1	M
415		*R. P. L. 79.—s.p.*			
Oct. 17	...	10 59 4·33	1	1 41 50·9	C. R
Nov. 2	...	59 4·02	3	41 54·0	C. R
6	...	59 3·18	3	41 52·9	M
416		*χ¹ Hydræ.*			
Mar. 22	5·2	10 59 27·34	...	116 38 5·2	M
27	5·6	59 27·34	...	38 7·3	M
Apl. 8	5·0	59 27·21	...	38 6·8	R
11	5·0	59 27·14	...	38 5·8	R
22	5·0	59 27·11	...	38 7·0	R
417		*χ² Hydræ.*			
Mar. 30	5·5	11 0 2·69	...	116 37 43·8	M
Apl. 1	5·6	0 2·73	...	37 44·0	M
9	5·0	0 2·87	...	37 42·2	R
12	5·0	0 2·68	...	37 43·2	R
24	5·0	0 2·73	...	37 42·9	R
418		*Taylor* 5054.			
May 4	4·5	11 1 18·66	...	148 0 57·7	R
10	5·0	1 18·70	...	0 54·0	R
21	5·7	1 18·82	...	0 56·8	M
419		*52 Ursæ Majoris ψ*			
Apl. 15	3·5	11 2 47·95	...	44 50 21·5	R
30	3·5	2 47·92	...	50 22·2	R
May 6	3·5	2 47·91	...	50 23·0	R
17	3·8	2 48·00	...	50 21·9	M
20	3·6	2 48·10	...	50 23·0	M
420		*Taylor* 5068.			
Apl. 27	5·0	11 2 49·72	...	117 25 10·2	R
29	5·0	2 49·70	...	25 10·5	R
May 1	5·0	2 49·77	...	25 10·4	R
8	5·0	2 49·89	...	25 11·1	R
15	5·0	2 49·88	...	25 8·7	R
421		*x Carinæ.*			
Mar. 26	5·3	11 3 23·09	...	148 18 50·9	M
28	5·4	3 23·05	...	18 53·2	M
Apl. 4	5·5	3 22·84	...	18 48·8	R
25	5·5	3 22·89	...	18 51·9	R
26	5·5	3 22·96	...	18 51·5	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h.	m.	s.	No of Wires.	Mean Polar Distance 1878. °	′	″	Observer.
422		*Taylor* 5077.							
Apl. 12	5·0	11	4	1·58	...	121	42	19·0	R
22	5·0		4	1·61	...		42	19·5	R
May 11	5·0		4	1·48	...		42	18·5	R
22	5·7		4	1·63	...		42	17·3	M
23	5·4		4	1·66	...		42	18·2	M
423		68 *Leonis* δ							
Mar. 21	...	11	7	37·03	...	68	48	29·4	M
Apl. 6	...		7	37·10	...		48	27·9	R
9	...		7	37·19	...		48	27·0	R
11	...		7	37·12	...		48	27·0	R
29	...		7	37·11	...		48	26·8	R
May 29	...		7	37·10	...		48	27·1	M
424		72 *Leonis*							
Apl. 3	5·0	11	8	42·97	...	66	14	21·6	R
5	5·0		8	42·96	...		14	20·5	R
10	5·0		8	42·79	...		14	24·1	R
May 1	5·0		8	42·88	...		14	23·7	R
4	5·0		8	42·83	...		14	25·8	R
425		53 *Ursæ Majoris* ξ							
Apl. 15	...	11	11	40·13	...	57	47	4·5	R
24	...		11	40·13	...		47	3·6	R
May 6	...		11	40·16	...		47	6·2	R
10	...		11	40·28	...		47	3·4	R
11	...		11	40·32	...		47	3·3	R
426		54 *Ursæ Majoris* ν							
Apl. 17	4·0	11	11	53·01	...	56	14	24·5	R
25	4·0		11	53·12	...		14	26·8	R
May 8	4·0		11	52·97	...		14	23·3	R
15	4·0		11	52·96	...		14	23·7	R
16	4·5		11	53·06	...		14	23·4	M
427		55 *Ursæ Majoris.*							
Apl. 27	5·0	11	12	28·79	...	51	8	41·5	R
May 1	5·0		12	28·83	...		8	42·7	R
17	5·2		12	28·82	...		8	41·7	M
20	5·4		12	28·88	...		8	42·5	M
21	5·7		12	28·83	...		8	41·6	M

Number and Date.	Magnitude.	Mean Right Ascension 1878. h.	m.	s.	No. of Wires.	Mean Polar Distance 1878. °	′	″	Observer.
428		12 *Crateris* δ							
Mar. 23	...	11	13	14·38	...	104	7	6·1	M
25	...		13	14·44	...		7	4·7	M
26	...		13	14·37	...		7	6·2	M
27	...		13	14·45	...		7	7·0	M
28	...		13	14·50	...		7	6·2	M
29	...		13	14·31	...		7	6·2	M
Apl. 1	...		13	14·49	...		7	7·0	M
2	...		13	14·41	...		7	7·0	M
4	...		13	14·50	...		7	4·9	R
8	...		13	14·51	...		7	5·7	R
12	...		13	14·52	...		7	5·8	R
22	...		13	14·54	...		7	5·5	R
26	...		13	14·53	...		7	4·8	R
30	...		13	14·53	...		7	5·2	R
May 4	...		13	14·48	...		7	5·6	R
30	...		13	14·69	...		7	5·4	M
31	...		13	14·36	...		7	6·1	M
June 1	...		13	14·48	...		7	6·3	M
4	...		13	14·42	...		7	7·0	M
5	...		13	14·35	...		7	8·1	M
429		*Taylor* 5193.							
Mar. 30	7·7	11	16	46·36	...	147	42	57·9	M
Apl. 3	7·6		16	46·59	...		42	55·7	R
5	7·6		16	46·55	...		42	54·9	R
6	7·6		16	46·48	...		42	55·0	R
11	7·7		16	46·58	...		42	56·1	R
430		*Taylor* 5195.							
Apl. 26	5·5	11	17	18·13	...	125	29	44·1	R
27	5·5		17	18·16	...		29	44·3	R
May 6	5·5		17	18·08	...		29	41·0	R
15	5·5		17	18·26	...		29	43·0	R
23	5·3		17	18·14	...		29	43·9	M
27	5·5		17	18·32	...		29	42·8	M
431		*Taylor* 5198.							
Apl. 25	7·8	11	17	18·47	...	147	38	46·9	R
29	7·8		17	18·44	...		38	45·7	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
432		14 *Crateris* ε			
Apl. 17	5·0	11 18 27·06	...	100 11 23·1	R
22	5·0	18 27·05	...	11 24·6	R
May 1	5·0	18 26·99	...	11 23·3	R
8	5·0	18 26·87	...	11 23·9	R
11	5·0	18 26·85	...	11 25·2	R
28	5·0	18 26·97	...	11 23·4	M
433		*Radcliffe* 2679.			
Apl. 15	5·0	11 19 3·29	...	33 28 50·3	R
24	5·0	19 3·47	...	28 51·2	R
30	5·0	19 3·53	...	28 53·9	R
May 4	5·0	19 3·56	...	28 55·1	R
10	5·0	19 3·56	...	28 50·2	R
434		1 *Draconis* λ			
Mar. 29	...	11 24 8·77	...	19 59 43·7	M
Apl. 6	...	24 8·64	...	59 44·5	R
8	...	24 8·65	...	59 46·3	R
9	...	24 8·69	...	59 46·1	R
11	...	24 8·73	...	59 47·6	R
435		17 *Hydræ*—2*nd*.			
Apl. 5	5·0	11 26 13·82	...	118 35 32·0	R
17	5·0	26 13·65	...	35 34·9	R
25	5·0	26 13·70	...	35 34·4	R
May 1	5·0	26 13 91	...	35 33·9	R
4	5·0	26 13·65	...	35 34·7	R
436		*Taylor* 5282.			
May 6	5·5	11 26 52·28	...	120 24 50·2	R
8	5·5	26 52·42	...	24 50·7	R
10	5·5	26 52·36	...	24 49·5	R
June 1	5·4	26 52·26	...	24 50·5	M
3	5·5	26 52·31	...	24 52·7	M
437		91 *Leonis* υ			
Mar. 22	...	11 30 42·13	...	90 9 0·7	M
28	...	30 42·05	...	9 0·7	M
Apl. 2	...	30 42·11	...	9 1·4	M
Apl. 10	...	11 30 42·00	...	90 8 59·4	R
22	...	30 42·01	...	9 0·2	R
24	...	30 42·09	...	8 59·8	R
25	...	30 42·10	...	8 59 9	R
27	...	30 42·08	...	8 59·2	R
May 1	...	30 42·08	...	8 59·1	R
6	...	30 42·06	...	8 58·9	R
16	...	30 42·16	...	8 59·5	M
17	...	30 42·09	...	8 59·0	M
24	...	30 42·00	...	9 1·1	M
29	...	30 42·11	...	8 59·7	M
31	...	30 42·16	...	9 0·3	M
June 4	...	30 42·20	...	9 0·1	M
438		*Anon*.			
May 21	7·9	11 31 50·20	...	150 48 34·1	M
23	8·0	31 50·20	...	48 36·4	M
25	8·0	31 50·41	...	48 35·4	M
439		24 *Crateris* ι			
May 4	5·5	11 32 28·19	...	102 31 47·8	R
8	5·5	32 28·24	...	31 47·9	R
11	5·5	32 28·25	...	31 47·9	R
June 5	5·9	32 28·35	...	31 50·3	M
8	6·0	32 28·29	...	31 49·6	M
440		ο *Hydræ*.			
May 1	5·5	11 34 9·37	...	124 4 5·9	R
10	5·5	34 9·21	...	4 5·3	R
15	5·5	34 9·29	...	4 5·8	R
441		63 *Ursæ Majoris* χ			
May 4	4·0	11 39 35·79	...	41 32 36·4	R
6	4·0	39 35·78	...	32 36·8	R
11	4·0	39 35·93	...	32 35·9	R
June 1	4·2	39 36·20	...	32 33·6	M
442		λ *Muscæ*.			
May 8	4·5	11 39 51·32	...	156 3 10·5	R
20	4·4	39 51·53	...	3 9·4	M
22	4·8	39 51·56	...	3 10·0	M
June 7	4·9	39 51·59	...	3 8·9	M

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
443		*Taylor* 5402.			
May 10	5·5	11 40 37·21	...	150 30 1·0	R
15	5·5	40 37·21	...	30 0·5	R
27	5·4	40 37·19	...	30 0·9	M
444		93 *Leonis.*			
May 16	...	11 41 41·39	...	69 6 11·2	M
17	5·0	41 41·36	...	6 10·6	M
24	4·6	41 41·43	...	6 10·8	M
445		94 *Leonis* β, *Deneb.*			
Mar. 30	...	11 42 50·28	...	74 44 46·2	M
May 28	...	42 50·18	...	44 46·0	M
29	...	42 50·15	...	44 46·4	M
31	...	42 50·20	...	44 46·8	M
June 6	...	42 50·27	...	44 46·7	M
10	...	42 50·22	...	44 47·1	M
446		55 *Centauri.*			
Apl. 30	5·5	11 45 2·97	...	134 29 40·2	R
May 1	5·5	45 2·77	...	29 41·8	R
21	5·6	45 2·92	...	29 40·6	M
23	5·4	45 2·84	...	29 40·3	M
25	5·5	45 2·96	...	29 41·8	M
447		*Taylor* 5437.			
May 4	5·5	11 46 8·43	...	146 18 36·9	R
8	5·5	46 8·58	...	18 36·0	R
11	5·5	46 8·56	...	18 36·4	R
448		*c Hydræ.*			
May 6	5·5	11 47 17·46	...	124 23 11·6	R
10	5·5	47 17·56	...	23 12·2	R
15	5·5	47 17·54	...	23 11·4	R
June 5	6·0	47 17·62	...	23 12·3	M
8	5·9	47 17·49	...	23 15·9	M

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
449		31 *Crateris.*			
Apl. 30	5·5	11 54 37·02	...	108 58 47·6	R
May 1	5·5	54 37·03	...	58 46·4	R
4	5·5	54 36·91	...	58 47·3	R
6	5·5	54 36·93	...	58 46·7	R
8	5·5	54 36·98	...	58 47·6	R
450		67 *Centauri.*			
May 10	5·5	11 57 20·80	...	131 45 3·5	R
11	5·5	57 20·77	...	45 3·2	R
16	6·0	57 20·86	...	45 2·8	M
June 1	5·5	57 20·78	...	45 3·2	M
4	5·4	57 20·81	...	45 3·6	M
451		θ^2 *Crucis.*			
May 15	5·5	11 58 2·94	...	152 29 12·0	R
22	5·4	58 3·06	...	29 12·0	M
27	5·4	58 2·97	...	29 11·2	M
June 7	5·4	58 3·05	...	29 12·3	M
452		*R. P. L.* 89.			
May 20	...	11 58 35·91	3	3 44 11·0	M
25	...	58 36·45	3	44 11·7	M
31	...	58 36·62	3	44 11·3	M
		R. P. L. 89.—*sp.*			
Nov. 14	...	11 58 36·63	2	3 44 14·9	M
21	...	58 36·03	2	44 14·0	M
453		η *Crucis.*			
Apl. 30	4·5	12 0 31·87	...	153 56 2·2	R
May 1	4·5	0 31·84	...	56 1·9	R
6	4·5	0 31·85	...	56 0·9	R
21	4·6	0 31·90	...	55 58·1	M
23	4·5	0 31·97	...	55 59·8	M

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
454		*2 Corvi ϵ*			
May 4	...	12 3 51·15	...	111 56 26·5	R
8	...	3 51·24	...	56 27·1	R
10	...	3 51·12	...	56 26·4	R
17	...	3 51·04	...	56 26·2	M
30	...	3 50·99	...	56 26·6	M
June 8	...	3 51·11	...	56 27·3	M
11	...	3 50·95	...	56 27·1	M
12	...	3 51·21	...	56 28·6	M
455		*Radcliffe* 2811.			
May 27	5·3	12 6 28·18	...	11 42 19·2	M
28	5·5	6 28·36	..	42 17·8	M
29	5·9	6 28·45	...	42 19·5	M
June 5	5·8	6 28·19	...	42 20·7	M
6	5·6	6 28·35	...	42 19·9	M
456		*Taylor* 5607—*2nd.*			
Apl. 30	5·5	12 7 40·31	...	135 2 42·8	R
May 6	5·5	7 40·36	...	2 41·3	R
11	5·5	7 40·24	...	2 43·5	R
15	5·5	7 40·33	...	2 43·5	R
16	5·7	7 40·26	...	2 43·0	M
457		*6 Comæ.*			
May 1	5·0	12 9 48·48	...	74 25 17·4	R
8	5·0	9 48·57	...	25 19·0	R
10	5·0	9 48·54	...	25 20·2	R
June 1	5·1	9 48·55	...	25 17·5	M
3	5·4	9 48·40	...	25 19·7	M
458		*2 Canum Venaticorum.*			
May 30	5·4	12 10 0·65	...	48 39 37·5	M
31	5·6	10 0·85	...	39 36·3	M
June 4	5·7	10 0·67	...	39 37·7	M
10	5·8	10 0·68	...	39 37·3	M
11	5·8	10 0·65	...	39 37·5	M
459		*7 Comæ.*			
May 20	5·6	12 10 10·11	...	65 22 33·2	M
June 12	5·7	10 10·11	...	22 34·4	M
460		*l Canum Venaticorum.*			
May 22	5·8	12 10 22·23	4	56 15 22·8	M
June 8	5·4	10 22·07	...	15 22·7	M
15	5·4	10 22·16	...	15 24·7	M
461		*ζ Crucis.*			
May 4	5·0	12 11 50·22	5	153 19 31·3	R
21	4·9	11 50·33	...	19 29·3	M
462		*15 Virginis η*			
May 6	...	12 13 39·84	...	89 59 17·2	R
11	...	13 39·86	...	59 17·8	R
15	...	13 39·82	...	59 18·0	R
24	...	13 39·87	...	59 18·1	M
463		*5 Corvi ζ*			
Apl. 30	5·5	12 14 14·67	...	111 32 13·7	R
May 10	5·5	14 14·61	...	32 13·0	R
23	5·7	14 14·83	...	32 13·1	M
25	5·5	14 14·67	...	32 14·2	M
June 7	5·8	14 14·71	...	32 13·5	M
464		*R. P. L.* 93.—*s.p.*			
Nov. 9	...	12 14 19·31	2	1 37 26·4	M
465		*11 Comæ.*			
May 17	5·2	12 14 33·08	...	71 31 57·8	M
466		*12 Comæ.*			
May 1	5·0	12 16 22·29	...	63 28 35·3	R
8	5·0	16 22·36	...	28 37·6	R
467		*6 Corvi.*			
May 16	5·8	12 17 0·31	...	114 9 47·0	M
468		*13 Comæ.*			
May 4	5·0	12 18 10·95	...	63 13 27·9	R
29	5·7	18 11·13	...	13 27·5	M
June 6	5·5	18 11·15	...	13 27·9	M

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
469		14 *Comæ.*			
May 6	5·0	12 20 17·88	...	62 3 18·6	R
28	5·4	20 17·92	...	3 18·5	M
June 1	5·3	20 17·96	...	3 19·0	M
11	5·7	20 17·88	...	3 20·0	M
470		15 *Comæ γ*			
Apl. 30	4·5	12 20 51·26	...	61 3 10·1	R
May 1	4·5	20 51·28	...	3 9·4	R
June 4	5·0	20 51·40	...	3 10·9	M
471		16 *Comæ.*			
May 10	5·0	12 20 53·30	...	62 29 53·4	R
27	5·2	20 53·39	...	29 53·7	M
472		*σ Centauri.*			
May 11	4·5	12 21 26·71	...	139 33 14·9	R
473		*u Centauri.*			
May 8	5·0	12 21 53·37	...	128 21 56·1	R
15	5·0	21 53·32	...	21 55·0	R
June 5	5·7	21 53·45	...	21 57·1	M
12	5·4	21 53·58	...	21 57·0	M
474		8 *Corvi η*			
May 4	4·5	12 25 46·91	...	105 31 10·6	R
11	4·5	25 46·81	...	31 12·0	R
16	4·4	25 47·00	...	31 11·9	M
June 7	4·8	25 46·85	...	31 10·8	M
10	4·9	25 46·91	...	31 12·2	M
475		8 *Canum Venaticorm β*			
Apl. 30	4·0	12 27 56·65	...	47 58 44·4	R
May 1	4·0	27 56·71	...	58 43·9	R
6	4·0	27 56·72	...	58 45·3	R
8	4·0	27 56·76	...	58 46·7	R
17	4·3	27 56·68	...	58 44·3	M

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
476		9 *Corvi β*			
June 11	...	12 27 58·93	...	112 43 16·1	M
13	...	27 58·89	...	43 16·5	M
477		5 *Draconis κ*			
May 20	3·8	12 28 16·54	...	19 32 18·9	M
21	3·5	28 16·60	...	32 18·3	M
22	3·9	28 16·51	...	32 16·7	M
478		23 *Comæ.*			
May 23	4·9	12 28 46·50	...	66 41 54·0	M
25	4·7	28 46·64	...	41 55·0	M
June 6	5·0	28 46·56	...	41 56·0	M
479		24 *Comæ—2nd.*			
May 10	...	12 29 0·57	...	70 57 2·2	R
15	...	29 0·48	...	57 2·4	R
31	...	29 0·53	...	57 3·1	M
June 8	...	29 0·33	...	57 2·8	M
15	...	29 0·47	...	57 3·2	M
480		*τ Centauri.*			
May 30	5·3	12 31 2·10	...	137 52 9·5	M
481		*d Hydræ.*			
May 4	5·5	12 31 14·33	...	116 27 50·5	R
11	5·5	31 14·38	...	27 50·3	R
28	5·9	31 14·30	...	27 49·0	M
June 4	5·9	31 14·31	...	27 50·5	M
482		*ι Centauri.*			
May 6	5·0	12 33 16·53	...	129 18 54·3	R
16	5·2	33 16·66	...	18 55·6	M
27	5·1	33 16·57	...	18 56·3	M
June 1	5·2	33 16·51	...	18 55·4	M
3	5·3	33 16·55	...	18 55·4	M

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
483		30 *Virginis* ρ			
May 10	5·0	12 35 42·59	...	79 5 28·5	R
15	5·0	35 42·45	...	5 28·2	R
24	5·4	35 42·43	...	5 27·7	M
June 5	5·5	35 42·46	...	5 30·7	M
7	5·6	35 42·57	...	5 29·3	M
484		*Taylor* 5839.			
May 8	5·5	12 35 50·74	...	138 8 32·5	R
29	5·8	35 50·67	...	8 33·3	M
June 12	5·5	35 50·91	...	8 32·6	M
485		ι *Crucis*.			
May 4	5·5	12 38 28·31	...	150 18 40·2	R
11	5·5	38 28·22	...	18 40·0	R
25	5·4	38 28·41	...	18 40·9	M
486		27 *Comæ*.			
May 6	5·0	12 40 32·99	...	72 45 19·4	R
10	5·0	40 32·89	...	45 20·8	R
15	5·0	40 32·98	...	45 19·3	R
June 8	5·5	40 33·08	...	45 21·1	M
487		*Taylor* 5906.			
May 4	5·5	12 45 14·10	...	129 0 57·1	R
16	5·9	45 14·36	...	0 57·4	M
17	6·0	45 14·18	...	0 57·4	M
June 4	5·9	45 14·20	...	0 57·4	M
10	5·9	45 14·14	...	0 57·7	M
488		*Taylor* 5918.			
May 20	5·4	12 46 12·90	...	138 16 44·5	M
21	5·6	46 13·08	...	16 43·5	M
22	5·7	46 13·26	...	16 43·4	M
June 1	5·7	46 13·23	...	16 44·4	M
489		κ *Crucis*.			
May 6	5·5	12 46 32·44	...	149 42 47·0	R
10	5·5	46 32·40	...	42 46·9	R
11	5·5	46 32·38	...	42 46·5	R
490		*n Centauri*.			
May 23	5·3	12 46 41·00	...	129 30 53·3	M
24	5·3	46 40·91	...	30 53·5	M
30	5·5	46 40·95	...	30 54·1	M
491		35 *Comæ*.			
May 31	...	12 47 17·40	...	68 5 28·7	M
June 3	...	47 17·43	...	5 31·4	M
12	...	47 17·55	...	5 32·9	M
492		o *Centauri*—1st.			
May 27	5·0	12 47 26·05	...	146 30 53·1	M
28	5·2	47 25·94	...	30 51·7	M
493		*R. P. L.* 98.			
May 8	...	12 48 6·67	3	5 55 5·5	R
15	...	48 6·69	3	55 3·2	R
494		*R. P. L.* 99.			
June 15	...	12 48 14·86	3	5 55 24·7	M
		R. P. L. 99.—*sp.*			
Nov. 25	...	12 48 14·65	2	5 55 27·8	M
27	...	48 14·82	3	55 26·0	M
495		*Taylor* 5944.			
May 29	5·7	12 48 46·44	...	146 10 26·1	M
June 17	5·5	48 46·55	...	10 27·0	R
496		12 *Canum Venaticorum* a			
June 7	...	12 50 18·97	...	51 1 19·6	M
11	...	50 19·06	...	1 20·3	M
497		36 *Comæ*.			
May 4	4·5	12 52 53·38	...	71 55 56·5	R
6	4·5	52 53·14	...	55 56·5	R
10	4·5	52 53·26	...	55 58·4	R
June 5	4·4	52 53·37	...	55 58·6	M
8	4·8	52 53·38	...	55 56·0	M

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
498		37 *Comæ.*			
May 8	5·0	12 54 26·09	...	58 33 22·6	R
11	5·0	54 26·17	...	33 22·0	R
16	5·8	54 26·28	...	33 21·8	M
June 17	5·0	54 26·28	...	33 24·1	R
499		78 *Ursæ Majoris*			
May 15	5·0	12 55 29·20	...	32 58 31·1	R
500		ξ^1 *Centauri.*			
May 20	5·7	12 56 30·08	...	138 52 14·5	M
25	5·6	56 30·16	...	52 13·9	M
501		*Taylor* 6013.			
May 4	5·5	12 59 12·69	...	137 48 30·0	R
21	5·7	59 12·84	...	48 28·7	M
June 4	5·4	59 12·88	...	48 30·3	M
19	5·5	59 12·62	...	48 30·5	R
20	5·5	59 12·72	...	48 31·1	R
502		ξ^2 *Centauri.*			
May 22	5·0	12 59 47·72	...	139 15 6·3	M
503		14 *Canum Venaticorum.*			
May 6	5·0	13 0 1·94	...	53 32 49·4	R
17	5·4	0 2·13	...	32 49·0	M
31	6·0	0 2·20	...	32 53·0	M
June 12	5·2	0 2·09	...	32 50·9	M
18	5·0	0 2·01	...	32 51·5	R
504		θ *Muscæ.*			
May 23	5·9	13 0 15·69	...	154 39 8·2	M
505		39 *Comæ.*			
May 24	5·9	13 0 24·33	...	68 11 29·2	M
506		41 *Comæ.*			
May 27	...	13 1 19·55	...	61 43 12·4	M
28	...	1 19·40	...	43 11·4	M
507		49 *Virginis g.*			
May 10	...	13 1 30·45	...	100 5 13·8	R
508		*B. F.* 1805.			
May 15	5·5	13 2 10·92	...	98 19 48·2	R
509		45 *Hydræ* ψ			
May 29	5·4	13 2 29·15	...	112 27 53·1	M
30	5·4	2 29·04	...	27 53·9	M
June 8	4·9	2 29·03	...	27 53·9	M
17	4·5	2 29·17	...	27 53·4	R
510		51 *Virginis* θ			
May 8	...	13 3 37·99	...	94 53 11·5	R
11	...	3 38·06	...	53 13·5	R
June 3	...	3 38·06	...	53 12·1	M
10	...	3 38·13	...	53 12·6	M
13	...	3 37·99	...	53 11·7	M
511		*Taylor* 6056.			
June 1	5·0	13 4 25·22	...	132 43 5·3	M
512		*m Centauri.*			
May 4	5·5	13 5 15·09	...	127 9 19·4	R
June 19	5·5	5 14·92	...	9 19·1	R
513		43 *Comæ* β			
June 5	4·4	13 6 11·07	...	61 30 11·4	M
July 6	...	6 10·82	...	30 9·9	C.R
10	...	6 10·87	5	30 8·9	C.R
514		*Taylor* 6077.			
June 18	5·5	13 6 42·67	...	148 27 3·4	R
515		*m Canum Venaticorum.*			
May 10	5·0	13 8 10·67	...	49 12 1·3	R
15	5·0	8 10·77	...	12 0·3	R
June 20	5·5	8 10·67	...	12 1·0	R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
516		57 *Virginis.*			
May 16	6·0	13 9 22·82	...	109 17 35·2	M
June 17	5·5	9 23·08	...	17 36·0	R
517		61 *Virginis*			
May 20	4·6	13 12 1·34	...	107 37 54·7	M
21	4·6	12 1·17	...	37 53·0	M
June 19	4·5	12 1·33	...	37 53·5	R
518		20 *Canum Venaticorum.*			
May 22	5·4	13 12 4·37	...	48 47 3·8	M
519		21 *Canum Venaticorum.*			
~~May 3~~	...	13 13 ~~3·78~~	...	~~39 40 26·7~~	R
15	5·0	13 3·96	...	40 30·6	R
~~23~~	5·4	13 ~~3·75~~	...	40 ~~31·0~~	M
June 4	5·3	13 ~~3·75~~	...	40 33·2	M
8	5·5	13 ~~3·94~~	...	40 31·2	M
520		67 *Virginis a, Spica.*			
May 24	...	13 18 45·99	...	100 31 25·4	M
June 3	...	18 45·92	...	31 26·4	M
10	...	18 45·87	...	31 25·4	M
July 2	...	18 45·94	...	31 26·0	C.R
521		68 *Virginis i.*			
May 15	5·0	13 20 16·55	...	102 4 17·7	R
29	5·0	20 16·57	...	4 19·5	M
June 1	5·3	20 16·69	...	4 20·3	M
5	5·3	20 16·62	...	4 21·2	M
19	5·0	20 16·23	...	4 17·8	R
522		69 *Virginis.*			
May 4	...	13 20 56·77	...	105 20 23·9	R
6	...	20 56·76	...	20 23·4	R
10	...	20 56·66	...	20 23·6	R
June 20	...	20 56·71	...	20 24·9	R
July 12	...	20 56·84	...	20 24·2	C.R
523		*d Centauri.*			
May 8	4·5	13 23 58·44	...	128 46 35·1	R
16	5·9	23 58·56	...	46 36·0	M
17	4·8	23 58·42	...	46 34·5	M
June 4	4·6	23 58·43	...	46 35·6	M
8	4·7	23 58·48	...	46 35·8	M
524		*Taylor* 6235.			
May 20	8·5	13 24 7·46	...	70 18 40·6	M
22	8·4	24 7·62	...	18 38·8	M
28	8·1	24 7·51	...	18 38·9	M
525		79 *Virginis* ζ			
May 10	...	13 28 28·65	...	89 58 14·9	R
15	...	28 28·66	...	58 14·8	R
June 7	...	28 28·85	...	58 15·9	M
July 2	...	28 28·64	...	58 16·3	C.R
526		24 *Canum Venaticorum.*			
May 4	5·0	13 29 27·94	...	40 21 32·0	R
8	5·0	29 27·93	...	21 35·1	R
21	5·1	29 27·89	...	21 31·4	M
June 12	5·1	29 28·12	...	21 34·6	M
15	5·3	29 27·93	5	21 35·4	M
527		25 *Canum Venaticorum.*			
May 6	5·0	13 32 2·43	...	53 5 0·1	R
25	5·6	32 2·62	...	5 1·8	M
27	5·3	32 2·60	...	5 2·5	M
June 20	5·0	32 2·51	...	5 2·4	R
26	5·0	32 2·67	...	5 2·5	R
528		*Lacaille* 5632.			
May 23	5·9	13 33 56·63	...	143 56 27·0	M
June 1	6·0	33 56·58	...	56 27·5	M
4	5·5	33 56·59	...	56 25·2	M
5	5·9	33 56·45	...	56 26·1	M
19	5·5	33 56·57	...	56 26·3	R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
529		83 *Ursæ Majoris.*			
May 8	5·0	13 36 6·63	...	34 41 59·2	R
10	5·0	36 6·54	...	41 59·8	R
16	5·6	36 6·78	...	41 58·6	M
June 10	5·9	36 6·57	...	41 59·6	M
11	5·0	36 6·69	...	41 56·5	M
530		1 *Centauri i.*			
May 6	5·0	13 38 45·30	...	122 25 32·1	R
17	5·0	38 45·38	...	25 31·9	M
29	5·3	38 45·15	...	25 32·9	M
June 8	5·4	38 45·29	...	25 33·4	M
18	5·0	38 45·25	...	25 34·7	R
531		*Taylor* 6376.			
May 22	5·2	13 38 56·60	5	140 49 8·5	M
June 20	5·0	38 56·44	...	49 9·6	R
July 6	...	38 56·41	...	49 7·8	C.R
8	...	38 56·56	...	49 9·5	C.R
12	...	38 56·68	...	49 9·5	C.R
532		4 *Bootis* τ			
May 10	...	13 41 27·76	...	71 56 3·2	R
20	...	41 27·67	...	56 4·6	M
21	...	41 27·78	...	56 2·4	M
June 12	...	41 27·89	...	56 4·4	M
13	...	41 27·93	...	56 4·5	M
533		2 *Centauri g.*			
May 8	5·0	13 42 22·79	...	123 50 25·9	R
28	5·3	42 22·72	...	50 26·8	M
31	5·2	42 22·72	...	50 26·4	M
June 3	5·3	42 23·00	...	50 26·4	M
19	5·0	42 22·75	...	50 25·5	R
534		5 *Bootis* υ			
June 20	4·0	13 43 35·39	...	73 35 46·4	R
26	4·0	43 35·34	...	35 45·9	R
July 10	...	43 35·47	...	35 44·8	C.R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
535		*Taylor* 6424—2*nd.*			
May 6	5·5	13 44 13·73	...	142 12 18·7	R
July 9	...	44 13·74	...	12 18·1	C.R
536		3 *Centauri h*			
May 27	4·6	13 44 47·28	...	122 23 16·7	M
June 18	4·5	44 47·26	...	23 17·6	R
537		4 *Centauri h*			
May 23	5·5	13 46 11·35	...	121 19 26·8	M
June 4	5·1	46 11·39	...	19 27·5	M
5	5·4	46 11·57	...	19 28·1	M
538		*Rumker* 360.			
May 15	7·8	13 46 12·23	...	150 43 55·7	R
25	8·0	46 12·35	...	43 56·5	M
539		10 *Draconis* ι			
May 4	4·5	13 47 52·04	...	24 40 22·9	R
10	4·5	47 52·02	...	40 23·6	R
July 12	...	47 51·99	...	40 22·9	C.R
540		8 *Bootis* η			
June 1	...	13 48 52·59	...	70 59 24·6	M
7	...	48 52·49	...	59 23·3	M
8	...	48 52·48	...	59 23·9	M
15	...	48 52·57	...	59 26·7	M
19	...	48 52·54	...	59 24·1	R
26	...	48 52·46	...	59 23·2	R
541		*G. Z. C.* XIII.—3120.			
July 6	7·7	13 50 57·43	...	149 58 17·5	C.R
542		9 *Bootis.*			
May 6	5·0	13 50 59·74	...	61 54 36·6	R
30	5·3	50 59·77	...	54 36·7	M
June 10	5·8	50 59·99	...	54 34·4	M
18	5·0	50 59·93	...	54 33·1	R
20	5·0	50 59·85	...	54 32·5	R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension. 1878. h. m. s.	No. of Wires.	Mean Polar Distance. 1878. ° ′ ″	Observer.
543		*v*¹ *Centauri.*			
May 22	5·1	13 51 9·08	...	134 12 25·9	M
29	5·0	51 9·04	...	12 25·7	M
31	5·3	51 9·15	...	12 25·9	M
June 11	5·8	51 9·25	...	12 25·4	M
July 8	...	51 9·25	...	12 26·1	C.R
544		*v*² *Centauri.*			
May 15	5·0	13 54 7·31	...	135 0 39·6	R
16	5·7	54 7·49	...	0 41·5	M
20	5·3	54 7·20	...	0 41·2	M
June 12	5·2	54 7·44	...	0 41·2	M
19	5·0	54 7·19	...	0 41·3	R
545		93 *Virginis* τ			
May 21	...	13 55 26·23	...	87 51 48·5	M
July 13	...	55 26·28	...	51 49·6	C.R
15	...	55 26·35	...	51 52·2	C.R
546		*h Hydræ.*			
May 4	5·5	13 55 26·57	...	116 50 21·7	R
6	5·5	55 26·61	...	50 21·1	R
10	5·5	55 26·47	...	50 21·7	R
June 13	6·0	55 26·60	...	50 22·5	M
July 9	5·2	55 26·56	...	50 23·0	C.R
547		χ *Centauri.*			
May 8	5·0	13 58 36·27	...	130 35 38·9	R
25	5·3	58 36·22	...	35 39·1	M
27	5·4	58 36·14	...	35 39·0	M
June 5	5·1	58 36·21	...	35 39·2	M
July 6	5·2	58 36·41	...	35 38·5	C.R
548		49 *Hydræ* π			
May 15	...	13 59 25·56	...	116 5 36·4	R
23	...	59 25·58	...	5 36·6	M
24	...	59 25·38	...	5 38·2	M
June 3	...	59 25·57	...	5 37·4	M
4	...	59 25·59	...	5 38·2	M

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
549		11 *Draconis* α			
May 28	4·0	14 1 5·25	...	25 2 22·4	M
June 15	4·0	1 4·98	4	2 27·7	M
18	3·5	1 5·05	...	2 23·9	R
19	3·5	1 5·08	...	2 23·0	R
20	3·5	1 5·11	...	2 24·2	R
550		*Taylor* 6600.			
May 29	5·7	14 4 10·87	...	105 43 26·7	M
June 1	5·7	4 10·74	...	43 26·4	M
10	5·9	4 10·86	...	43 27·8	M
21	...	4 10·95	...	43 26·0	R
24	...	4 10·94	...	43 27·6	R
551		50 *Hydræ.*			
May 8	5·0	14 5 46·65	...	116 41 8·9	R
15	5·0	5 46·53	...	41 8·5	R
June 11	5·2	5 46·79	...	41 9·7	M
July 10	5·3	5 46·82	...	41 8·6	C.R
11	...	5 46·77	...	41 12·4	C.R
552		*Taylor* 6616.			
July 8	5·5	14 6 28·15	...	146 30 48·5	C.R
553		17 *Bootis* κ—2*nd.*			
May 31	...	14 9 6·66	...	37 38 18·8	M
June 19	...	9 6·41	...	38 18·3	R
20	...	9 6·48	...	38 19·1	R
July 13	...	9 6·58	...	38 18·7	C.R
554		4 *Ursæ Minoris.*			
July 6	4·7	14 9 21·70	5	11 52 44·4	C.R
9	5·2	9 21·18	5	52 44·0	C.R
555		*Radcliffe* 3170.			
July 12	5·0	14 9 48·23	...	19 59 38·0	C.R
15	...	9 48·12	...	59 40·5	C.R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
556		16 *Bootis a, Arcturus.*			
May 16	...	14 10 5·83	...	70 10 52·4	M
30	...	10 5·81	...	10 55·6	M
June 8	...	10 5·96	...	10 55·7	M
15	...	10 5·89	...	10 57·2	M
24	...	10 5·84	...	10 53·7	R
25	...	10 5·81	...	10 53·3	R
Aug. 3	...	10 5·89	...	10 54·3	M
557		19 *Bootis* λ			
June 21	...	14 11 44·66	...	43 21 1·7	R
26	4·0	11 44·75	...	21 2·9	R
558		*ψ Centauri.*			
June 12	5·0	14 13 8·50	...	127 19 23·4	M
13	5·8	13 8·63	...	19 22·5	M
July 10	4·3	13 8·43	...	19 21·1	C.R
11	5·0	13 8·58	...	19 22·2	C.R
559		*a Centauri.*			
June 3	5·3	14 15 31·69	...	128 57 12·1	M
4	5·0	15 31·65	...	57 12·2	M
5	5·0	15 31·44	...	57 12·4	M
July 8	5·2	15 31·69	...	57 13·3	C.R
9	5·0	15 31·59	...	57 11·3	C.R
560		τ^1 *Lupi.*			
June 1	5·3	14 18 18·76	...	134 40 6·4	M
10	5·7	18 18·80	...	40 5·3	M
18	5·0	18 18·78	...	40 6·3	R
July 12	4·7	18 18·84	...	40 5·0	C.R
561		τ^2 *Lupi.*			
June 19	5·0	14 18 20·43	...	134 49 34·5	R
29	...	18 20·48	...	49 34·4	R
July 13	5·0	18 20·60	...	49 32·4	C.R
16	...	18 20·64	...	49 33·4	C.R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
562		52 *Hydræ.*			
June 11	...	14 21 1·95	...	118 56 32·3	M
21	...	21 1·85	...	56 30·8	R
563		23 *Bootis θ*			
July 15	...	14 21 2·45	...	37 35 5·8	C.R
564		*Anon.*			
May 25	9·5	14 21 40·14	...	93 50 23·9	M
27	9·6	21 40·17	...	50 21·7	M
28	9·6	21 39·92	...	50 22·9	M
June 20	9·0	21 39·99	...	50 21·3	R
July 6	9·5	21 40·05	...	50 22·8	C.R
565		105 *Virginis φ*			
June 25	...	14 21 54·92	...	91 40 47·7	R
27	5·0	21 54·93	...	40 47·9	R
July 9	5·3	21 54·99	...	40 48·9	C.R
566		*σ Lupi.*			
May 31	6·0	14 24 24·35	...	139 54 51·6	M
June 12	5·4	24 24·47	...	54 53·9	M
19	5·0	24 24·33	...	54 52·0	R
26	5·0	24 24·35	...	54 53·2	R
July 11	5·3	24 24·51	...	54 52·0	C.R
567		*Taylor* 6786.			
June 4	7·5	14 26 24·47	...	146 1 31·3	M
568		25 *Bootis ρ*			
May 20	...	14 26 34·34	...	59 5 31·0	M
21	...	26 34·30	...	5 30·0	M
22	...	26 34·30	...	5 30·8	M
June 15	...	26 34·29	...	5 32·9	M
21	...	26 34·35	...	5 32·7	R
24	...	26 34·26	...	5 32·8	R
27	...	26 34·35	...	5 31·5	R
29	...	26 34·86	...	5 32·7	R
Aug. 3	...	26 34·34	..	5 30·2	M

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
569		27 *Bootis* γ			
June 8	...	14 27 9·90	...	51 9 24·6	M
13	...	27 10·02	...	9 26·6	M
July 4	...	27 10·05	...	9 26·7	C.R
6	...	27 9·95	5	9 27·5	C.R
570		5 *Ursæ Minoris.*			
July 10	...	14 27 47·99	5	13 45 38·9	C.R
12	...	27 48·02	4	45 42·2	C.R
16	...	27 48·10	5	45 40·3	C.R
571		28 *Bootis* σ			
June 18	5·0	14 29 22·22	...	59 43 26·6	R
19	5·0	29 22·16	...	43 26·5	R
20	5·0	29 22·26	...	43 26·7	R
July 8	5·7	29 22·40	...	43 25·9	C.R
15	5·2	29 22·10	...	43 26·6	C.R
572		ρ *Lupi.*			
June 1	5·2	14 29 41·24	...	138 53 33·4	M
July 9	4·7	29 41·40	...	53 33·6	C.R
573		*l Centauri.*			
May 31	5·4	14 34 23·10	...	127 16 5·3	M
June 10	5·7	34 23·12	...	16 7·5	M
11	5·2	34 23·16	...	16 7·4	M
20	5·0	34 22·92	...	16 8·0	R
22	5·0	34 23·12	...	16 7·7	R
574		29 *Bootis* π			
June 5	...	14 34 59·71	...	73 3 28·5	M
25	...	34 59·55	..	3 28·1	R
27	...	34 59·56	...	3 29·4	R
July 4	...	34 59·81	5	3 29·7	C.R
6	...	34 59·65	5	3 28·6	C.R
575		30 *Bootis* ζ			
June 3	...	14 35 19·52	...	75 44 51·3	M
21	...	35 19·61	...	44 50·2	R
26	...	35 19·50	...	44 52·0	R
July 11	...	35 19·33	...	44 50·2	C.R
13	...	35 19·54	5	44 50·7	C.R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
576		31 *Bootis.*			
July 18	5·0	14 35 39·22	...	81 18 54·3	C.R
29	...	35 39·29	4	18 55·9	C.R
577		c^1 *Centauri.*			
June 12	5·0	14 36 11·83	...	124 38 48·4	M
July 9	4·7	36 11·93	...	38 48·2	C.R
10	5·2	36 11·93	...	38 48·0	C.R
578		c^2 *Centauri.*			
July 12	6·0	14 37 30·63	...	124 40 24·7	C.R
579		34 *Bootis.*			
June 8	4·9	14 38 3·55	...	62 57 10·0	M
13	4·8	38 3·62	...	57 9·7	M
July 16	5·7	38 3·59	...	57 8·7	C.R
580		35 *Bootis o*			
June 28	4·5	14 39 32·74	...	72 31 3·5	R
July 15	5·0	39 32·85	...	31 6·1	C.R
581		36 *Bootis* ϵ, *Mirac.*			
May 20	...	14 39 39·49	...	62 24 37·7	M
23	...	39 39·61	...	24 38·3	M
June 24	...	39 39·60	...	24 38·1	R
July 8	...	39 39·67	...	24 37·7	C.R
582		*Anon.*			
June 22	5·0	14 40 17·01	...	116 6 39·7	R
583		56 *Hydræ.*			
June 15	5·5	14 40 37·~~31~~ 71	...	115 34 29·9	M
584		7 *Libræ* μ			
June 21	...	14 42 37·90	...	103 38 20·0	R
27	5·0	42 37·95	...	38 20·7	R
29	...	42 37·89	...	38 22·2	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
585		58 *Hydræ.*			
July 11	5·2	14 43 7·52	...	117 27 3·2	C.R
586		*o Lupi.*			
June 1	5·0	14 43 40·88	...	133 4 7·8	M
11	5·4	43 40·93	...	4 6·9	M
July 10	5·5	43 40·76	...	4 6·6	C.R
587		9 *Libræ* α^2			
May 22	...	14 44 7·73	...	105 32 1·2	M
25	...	44 7·79	...	31 59·8	M
June 20	...	44 7·85	...	32 1·1	R
25	...	44 7·91	...	32 0·9	R
26	...	44 7·87	...	32 1·6	R
28	...	44 7·85	...	31 59·3	R
July 12	...	44 7·92	...	31 59·8	C.R
588		37 *Bootis* ξ^2—*2nd.*			
June 10	4·7	14 45 45·86	...	70 23 29·1	M
July 8	...	45 45·89	6	23 29·5	C.R
9	5·0	45 45·79	...	23 30·1	C.R
13	5·2	45 45·69	...	23 28·8	C.R
589		*Taylor* 6953.			
June 3	5·9	14 48 15·85	...	123 21 33·4	M
22	5·5	48 15·73	...	21 32·3	R
27	5·5	48 15·70	...	21 32·6	R
July 6	5·2	48 15·61	...	21 32·6	C.R
16	...	48 15·73	...	21 32·0	C.R
590		15 *Libræ* ξ^2			
June 19	...	14 50 8·85	...	100 54 57·6	R
21	...	50 8·92	...	54 57·1	R
25	...	50 8·92	...	54 58·4	R
July 12	...	50 8·99	...	54 56·6	C.R
591		16 *Libræ.*			
June 4	...	14 50 48·96	...	93 50 53·9	M
20	...	50 48·82	...	50 54·6	R
26	...	50 48·81	...	50 55·2	R
July 15	...	50 48·89	...	50 56·2	C.R
592		*Radcliffe* 3305.			
June 5	5·0	14 55 39·01	...	23 34 49·6	M
15	5·3	55 38·95	...	34 52·1	M
July 10	5·2	55 38·80	5	34 50·9	C.R
11	5·7	55 38·77	...	34 52·7	C.R
593		110 *Virginis.*			
June 8	...	14 56 44·14	...	87 25 41·8	M
11	...	56 44·23	...	25 42·0	M
13	...	56 44·20	...	25 42·0	M
594		π *Lupi.*			
June 20	5·0	14 56 49·18	...	136 34 19·0	R
26	5·0	56 49·03	...	34 20·0	R
29	...	56 49·13	...	34 19·4	R
July 15	5·0	56 49·27	6	34 19·1	C.R
16	...	56 49·26	...	34 18·3	C.R
595		20 *Libræ.*			
June 12	...	14 56 55·87	...	114 48 3·8	M
19	...	56 55·77	...	48 2·8	R
22	...	56 55·89	...	48 3·4	R
July 4	...	56 56·03	4	48 4·5	C.R
6	...	56 55·89	...	48 3·7	C.R
596		*Radcliffe* 3325.			
July 9	5·2	14 58 41·~~50~~ 12	3	~~8~~ 6 59 17·7	C.R
597		43 *Bootis* ψ			
May 23	...	14 59 13·07	...	62 34 31·3	M
25	...	59 13·08	...	34 32·3	M
27	...	59 13·07	...	34 32·5	M
June 21	...	59 13·05	...	34 33·3	R
July 8	...	59 13·35	...	34 32·4	C.R
598		44 *Bootis* ι			
June 10	...	14 59 45·93	...	41 52 6·7	M

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
599	*Taylor* 7053.				
July 11	6·0	15 2 10·98	...	144 52 47·4	C.R
12	6·2	2 11·05	...	52 46·1	C.R
600	*κ Lupi*—1*st.*				
June 19	5·0	15 3 27·47	...	138 16 19·5	R
July 10	4·7	3 27·64	5	16 18·6	C.R
601	*R. P. L.* 111.				
July 13	...	15 4 7·51	3	5 34 37·8	C.R
602	*e Lupi.*				
June 20	5·5	15 4 38·05	...	134 2 16·9	R
22	5·5	4 38·06	...	2 17·2	R
26	5·5	4 37·95	...	2 16·5	R
603	*β Circini.*				
July 15	5·3	15 7 58·73	...	148 20 37·3	C.R
604	48 *Bootis* χ				
June 21	...	15 9 23·28	...	60 22 54·0	R
8	5·7	9 23·33	...	22 54·0	C.R
605	*μ Lupi*—1*st.*				
July 11	4·8	15 10 3·25	...	137 25 26·7	C.R
606	2 *Lupi* δ				
June 11	4·9	15 10 24·65	...	119 41 54·7	M
15	4·9	10 24·42	...	41 55·2	M
607	27 *Libræ* β				
May 25	...	15 10 26·64	...	98 55 52·5	M
June 1	...	10 26·53	...	55 51·9	M
12	...	10 26·50	...	55 53·0	M
13	...	10 26·36	...	55 52·8	M
17	...	10 26·47	...	55 52·0	R
19	...	10 26·55	...	55 53·5	R
22	...	10 26·51	...	55 52·0	R
June 25	...	15 10 26·50	...	98 55 52·5	R
27	...	10 26·51	...	55 52·0	R
29	...	10 26·50	...	55 52·4	R
July 6	...	10 26·53	...	55 53·7	C.R
Aug. 5	...	10 26·59	...	55 52·0	M
608	49 *Bootis* δ—1*st.*				
June 24	...	15 10 34·90	...	56 13 44·9	R
26	3·5	10 34·81	...	13 43·7	R
609	*S Libræ, Var.* 5.				
July 10	9·8	15 14 23·73	6	109 56 47·1	C.R
12	9·9	14 23·88	5	56 49·3	C.R
13	9·8	14 23·78	5	56 47·6	C.R
610	ϕ^2 *Lupi.*				
June 27	5·0	15 15 21·61	...	126 25 9·5	R
28	5·0	15 21·59	...	25 9·3	R
29	...	15 21·56	...	25 10·0	R
611	11 *Ursæ Minoris.*				
July 11	5·0	15 17 12·12	5	17 43 59·2	C.R
15	5·7	17 12·15	5	44 0·6	C.R
612	*R. P. L.* 114—*s.p.*				
Jan. 5	...	15 17 12·37	2	2 18 3·8	M
8	...	17 12·35	3	18 3·5	M
10	...	17 12·45	3	18 3·4	M
14	...	17 12·64	3	18 3·3	M
Dec. 7	...	17 11·91	2	18 6·7	R
21	...	17 12·31	2	18 3·5	R
613	51 *Bootis* μ				
June 13	...	15 19 52·97	...	52 11 37·3	M
22	...	19 52·92	...	11 38·0	R
24	...	19 53·08	...	11 37·9	R
614	13 *Ursæ Minoris* γ				
July 13	...	15 20 55·79	5	17 43 53·4	C.R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
615	3 *Coronæ Borealis β*				
June 4	4·4	15 22 48·18	...	60 28 21·9	M
15	4·9	22 47·88	...	28 22·8	M
17	4·0	22 48·04	...	28 20·9	R
19	4·0	22 47·93	...	28 21·2	R
July 2	...	22 47·85	6	28 19·4	C.R
616	*ϵ Trianguli Australis.*				
June 27	5·0	15 25 34·84	...	155 54 16·3	R
July 6	4·7	25 34·69	...	54 17·1	C.R
10	5·2	25 34·79	5	54 14·8	C.R
11	4·5	25 34·81	...	54 15·1	C.R
15	5·5	25 34·95	...	54 16·6	C.R
617	*B. H.* 952.				
June 19	5·5	15 27 51·24	5	98 46 16·1	R
22	5·5	27 51·35	...	46 17·3	R
July 13	6·0	27 51·36	...	46 17·9	C.R
618	4 *Coronæ Borealis θ*				
June 24	...	15 28 0·77	...	58 13 41·0	R
25	...	28 0·78	...	13 41·2	R
28	4·5	28 0·73	...	13 42·0	R
July 8	5·0	28 0·85	...	13 40·6	C.R
619	5 *Coronæ Borealis a, Alpheta.*				
June 3	...	15 29 31·39	...	62 52 24·2	M
17	...	29 31·47	...	52 23·5	R
20	...	29 31·39	...	52 23·7	R
21	...	29 31·45	...	52 23·6	R
26	...	29 31·48	...	52 24·2	R
July 12	...	29 31·28	...	52 23·4	C.R
Aug. 5	...	29 31·44	...	52 24·5	M
9	...	29 31·39	...	52 23·4	M
12	...	29 31·45	...	52 24·1	M
620	40 *Libræ.*				
June 27	...	15 31 9·73	...	119 22 28·3	R
29	...	31 9·84	...	22 29·7	R
July 2	...	31 9·99	5	22 29·9	C.R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
621	3 *Lupi* ψ^1				
July 10	5·9	15 32 1·31	6	124 0 42·3	C.R
622	*g Lupi.*				
July 15	5·8	15 32 48·77	...	134 15 21·7	C.R
623	*h Lupi.*				
July 9	...	15 34 42·76	...	127 1 55·1	C.R
624	7 *Coronæ Borealis ζ—2nd.*				
June 13	6·0	15 34 47·22	...	52 58 0·4	M
July 8	5·3	34 47·31	6	57 59·9	C.R
625	15 *Ursæ Minoris θ*				
July 11	4·8	15 35 4·03	5	12 14 41·8	C.R
13	5·7	35 3·86	5	14 41·2	C.R
626	21 *Serpentis ι*				
June 20	...	15 36 6·53	...	69 56 8·6	R
26	...	36 6·47	...	56 9·9	R
July 12	...	36 6·73	...	56 6·9	C.R
627	44 *Libræ η*				
June 10	...	15 37 12·84	...	105 16 56·1	M
628	8 *Coronæ Borealis γ*				
June 17	...	15 37 37·24	...	63 18 59·7	R
27	...	37 37·30	...	18 58·7	R
629	24 *Serpentis a*				
June 18	...	15 38 15·50	...	83 11 21·1	R
19	...	38 15·51	...	11 20·9	R
22	...	38 15·63	...	11 21·1	R
28	...	38 15·58	...	11 20·5	R
29	...	38 15·57	...	11 19·7	R
July 2	...	38 15·54	...	11 21·0	C.R
6	...	38 15·54	...	11 21·4	C.R
10	...	38 15·58	...	11 20·2	C.R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
July 23	...	15 38 15·53	...	83 11 18·2	C.R
Aug. 6	...	38 15·50	...	11 19·2	M
9	...	38 15·51	...	11 19·0	M
12	...	38 15·53	...	11 20·1	M
630	27 *Serpentis* λ				
June 11	...	15 40 31·42	...	82 15 45·1	M
July 15	...	40 31·42	...	15 48·3	C.R
631	35 *Serpentis* κ				
June 20	4·0	15 43 14·82	...	71 28 49·1	R
22	4·0	43 14·88	...	28 49·2	R
28	4·0	43 14·84	...	28 48·3	R
632	κ *Trianguli Australis.*				
July 11	5·0	15 43 27·69	...	158 14 14·1	C.R
633	1 *Scorpii b.*				
June 17	5·0	15 43 38·65	...	115 22 44·5	R
19	5·0	43 38·63	...	22 42·7	R
26	5·0	43 38·52	...	22 43·8	R
Aug. 5	5·7	43 38·58	...	22 42·6	M
634	10 *Coronæ Borealis* δ				
June 24	...	15 44 28·60	...	63 33 25·2	R
27	4·5	44 28·63	...	33 25·9	R
July 8	4·5	44 28·85	...	33 24·6	C.R
10	...	44 28·56	...	33 23·3	C.R
635	38 *Serpentis* ρ				
July 2	...	15 45 54·42	...	68 39 15·0	C.R
6	4·5	45 54·43	...	39 15·5	C.R
12	6·0	45 54·35	...	39 13·5	C.R
636	*R. P. L.* 115.				
July 9	...	15 46 15·28	3	4 46 28·3	C.R
	R. P. L. 115—*s p.*				
Dec. 28	...	15 46 14·20	2	4 46 29·5	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
637	11 *Coronæ Borealis* κ				
July 13	...	15 46 38·06	...	53 57 45·4	C.R
638	ξ *Lupi*—1*st.*				
June 12	...	15 49 5·69	...	123 36 26·5	M
13	...	49 5·66	...	36 25·3	M
July 15	...	49 5·90	...	36 27·6	C.R
639	ξ *Lupi*—2*nd.*				
June 17	6·2	15 49 6·22	...	123 36 18·5	R
19	6·5	49 6·23	3	36 18·0	R
20	6·5	49 6·18	...	36 19·0	R
July 16	...	49 6·35	...	36 20·0	C.R
640	η *Lupi*—1*st.*				
June 11	4·3	15 52 2·41	...	128 2 45·3	M
22	4·5	52 2·29	...	2 46·8	R
26	4·5	52 2·19	...	2 47·6	R
July 9	4·0	52 2·40	...	2 46·4	C.R
641	13 *Coronæ Borealis* ϵ				
June 24	...	15 52 31·94	...	62 46 4·0	R
27	...	52 31·98	...	46 4·6	R
July 2	...	52 32·01	...	46 4·2	C.R
6	...	52 31·98	...	46 3·7	C.R
12	...	52 32·12	...	46 2·4	C.R
642	*Taylor* 7437.				
June 17	5·5	15 55 17·56	...	128 15 37·8	R
28	5·5	55 17·58	...	15 36·1	R
July 8	5·3	55 17·71	...	15 37·4	C.R
643	44 *Serpentis* π				
June 15	5·0	15 57 2·40	...	66 51 22·7	M
644	δ *Normæ.*				
July 11	4·7	15 57 52·34	...	134 50 24·2	C.R
15	...	57 52·59	...	50 25·7	C.R

49·0
49·4
49·5

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
645		8 *Scorpii* β^1			
June 18	...	15 58 20·75	...	109 28 10·9	R
20	...	58 20·67	...	28 8·7	R
27	...	58 20·67	...	28 9·8	R
July 9	...	58 20·67	6	28 11·0	C.R
10	...	58 20·65	...	28 9·6	C.R
16	...	58 20·67	...	28 9·7	C.R
23	...	58 20·65	...	28 8·6	C.R
Aug. 6	...	58 20·66	...	28 9·5	M
12	...	58 20·72	...	28 8·0	M
646		10 *Scorpii* ω^2			
June 17	4·5	16 0 15·14	...	110 32 14·3	R
22	4·5	0 15·09	...	32 17·4	R
28	4·5	0 15·03	...	32 17·2	R
July 2	...	0 15·12	5	32 14·3	C.R
6	5·2	0 15·19	...	32 14·5	C.R
647		*m Scorpii.*			
July 12	5·5	16 0 41·67	...	115 59 52·8	C.R
648		*R. P. L.* 116—*s. p.*			
Jan. 18	...	16 1 50·99	3	4 21 2·7	M
22	...	1 50·35	3	21 3·0	M
26	...	1 50·74	3	21 0·6	M
29	...	1 49·48	3	21 1·0	M
31	...	1 49·50	3	21 0·7	M
649		ζ *Normæ.*			
July 8	5·8	16 3 40·42	...	145 13 19·7	C.R
650		13 *Scorpii* c^2.			
June 11	5·2	16 4 47·48	...	117 36 29·4	M
18	5·0	4 47·45	...	36 29·5	R
651		15 *Scorpii* ψ			
June 20	5·0	16 5 19·86	...	99 44 47·3	R
27	5·0	5 19·82	...	44 47·3	R
652		*Radcliffe* 3511.			
July 15	...	16 5 59·56	5	21 52 4·5	C.R
653		1 *Ophiuchi* δ			
June 5	...	16 7 57·09	...	93 22 43·9	M
6	...	7 56·98	...	22 43·1	M
12	...	7 57·06	...	22 42·3	M
17	...	7 57·07	...	22 43·0	R
22	...	7 57·06	...	22 43·7	R
28	...	7 57·10	...	22 42·9	R
July 6	...	7 57·13	...	22 44·0	C.R
9	...	7 57·14	...	22 44·4	C.R
10	...	7 57·10	...	22 43·0	C.R
11	...	7 57·02	...	22 44·5	C.R
12	...	7 57·15	...	22 43·1	C.R
13	...	7 57·13	...	22 43·6	C.R
16	...	7 57·10	...	22 43·0	C.R
23	...	7 57·14	...	22 42·3	C.R
Aug. 9	...	7 57·16	...	22 41·0	M
654		18 *Scorpii.*			
July 2	...	16 8 59·39	...	98 2 42·3	C.R
655		λ *Normæ.*			
June 18	5·5	16 10 48·21	...	132 22 27·1	R
20	5·5	10 48·18	...	22 23·8	R
27	5·5	10 48·15	...	22 23·0	R
656		3 *Ophiuchi* υ			
Aug. 3	...	16 21 12·25	...	98 5 47·7	M
6	...	21 12·29	...	5 49·0	M
657		21 *Scorpii* α, *Antares.*			
June 5	...	16 21 55·91	...	116 9 34·5	M
18	...	21 55·67	...	9 34·5	R
July 8	...	21 55·93	...	9 34·5	C.R
9	...	21 55·68	...	9 34·1	C.R
11	...	21 55·68	...	9 34·3	C.R
13	...	21 55·71	...	9 33·3	C.R
15	...	21 55·88	...	9 34·7	C.R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
July 16	...	16 21 55·71	...	116 9 33·5	C.R
27	...	21 55·80	...	9 34·2	C.R
Aug. 5	...	21 55·61	...	9 34·4	M
658	*W. B. E.* 634.				
June 17	9·0	16 34 31·01	...	103 9 16·6	R
18	9·0	34 31·01	...	9 17·6	R
27	9·0	34 31·09	...	9 16·8	R
659	42 *Herculis.*				
Aug. 3	5·9	16 35 26·19	...	40 49 53·9	M
660	40 *Herculis* ζ				
June 4	...	16 36 41·27	...	58 10 30·2	M
6	...	36 41·31	...	10 30·8	M
July 15	...	36 41·11	...	10 32·2	C.R
27	...	36 41·11	...	10 30·3	C.R
661	μ^1 *Scorpii.*				
June 12	...	16 43 36·53	...	127 50 9·8	M
13	...	43 36·46	...	50 9·7	M
15	...	43 36·19	...	50 10·0	M
662	*Taylor* 7802.				
June 18	6·4	16 45 27·99	...	131 36 5·9	R
27	6·6	45 28·17	...	36 5·0	R
663	*Taylor* 7803.				
June 17	7·0	16 45 29·97	...	131 35 12·8	R
20	7·0	45 29·98	...	35 12·4	R
664	27 *Ophiuchi* κ				
July 24	...	16 51 53·70	...	80 26 0·4	C.R
27	...	51 53·65	...	26 2·4	C.R
Aug. 3	...	51 53·51	...	26 1·1	M
6	...	51 53·61	...	26 0·3	M
665	22 *Ursæ Minoris* ϵ				
July 6	...	16 58 32·21	4	7 45 51·1	C.R
		22 *Ursæ Minoris* ϵ—*s.p.*			
Feb. 6	...	16 58 32·50	3	7 45 53·1	R
9	...	58 31·91	3	45 53·2	R
13	...	58 31·50	3	45 53·5	R
666	*Lacaille* 7107.				
Aug. 16	5·5	17 0 50·18	...	157 2 13·9	R
667	36 *Ophiuchi* A—1*st.*				
Aug. 5	5·3	17 7 50·55	...	116 28 19·2	M
6	...	7 50·62	...	28 19·3	M
668	64 *Herculis a, Var.* 1				
July 24	...	17 9 4·99	...	75 28 7·2	C.R
Aug. 16	...	9 5·16	...	28 4·5	R
17	...	9 5·14	...	28 6·4	R
669	42 *Ophiuchi* θ				
July 11	...	17 14 31·16	5	114 52 33·8	C.R
Aug. 14	...	14 30·98	...	52 31·5	R
670	γ *Arcæ.*				
Aug. 15	3·0	17 15 7·63	...	146 15 33·7	R
16	3·0	15 7·70	...	15 33·4	R
671	β *Arcæ.*				
Aug. 19	3·0	17 15 9·51	...	145 24 41·3	R
20	3·0	15 9·45	...	24 38·6	R
672	κ^1 *Arcæ.*				
July 27	...	17 16 29·64	...	140 31 10·2	C.R
Aug. 17	...	16 29·42	...	31 9·3	R
21	5·0	16 29·52	...	31 9·2	R
673	51 *Ophiuchi* e^2.				
July 24	...	17 23 58·35	...	113 51 57·5	C.R
27	...	23 58·56	...	51 59·1	C.R
Aug. 3	...	23 58·26	...	51 58·3	M
6	...	23 58·45	...	51 58·1	M
17	...	23 58·31	...	51 57·4	R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
674		55 *Ophiuchi a*			
Aug. 14	...	17 29 16·26	...	77 20 55·9	R
16	...	29 16·24	...	20 55·4	R
20	...	29 16·30	...	20 56·0	R
21	...	29 16·24	...	20 55·5	R
675		85 *Herculis ι*			
Aug. 30	4·0	17 36 1·16	...	43 55 38·5	R
676		*Taylor* 8199.			
Aug. 13	6·5	17 36 42·58	5	65 21 52·1	R
14	...	36 42·51	...	21 54·6	R
15	6·5	36 42·44	...	21 53·3	R
16	6·4	36 42·56	...	21 53·2	R
677		*Taylor* 8227.			
Aug. 20	5·5	17 41 14·70	...	121 39 31·7	R
21	5·5	41 14·82	...	39 30·5	R
24	5·5	41 14·98	...	39 31·2	R
678		86 *Herculis μ*			
July 24	...	17 41 40·99	...	62 12 23·1	C.R
Aug. 14	...	41 41·08	...	12 22·5	R
15	...	41 41·04	...	12 23·3	R
17	...	41 41·00	...	12 22·4	R
19	...	41 41·04	...	12 22·2	R
26	...	41 41·11	...	12 22·9	R
30	...	41 41·04	...	12 22·0	R
679		62 *Ophiuchi γ*			
Aug. 28	4·0	17 41 46·48	...	87 14 42·8	R
29	4·0	41 46·52	...	14 41·1	R
680		*Lacaille* 7494.			
Aug. 5	7·0	17 48 17·52	...	122 27 7·4	M
13	7·0	48 17·37	...	27 7·4	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
681		*Lacaille* 7506.			
Aug. 14	...	17 48 47·47	...	116 44 54·4	R
16	7·2	48 47·38	...	44 54·2	R
682		*Lacaille* 7502.			
Aug. 15	7·0	17 48 50·45	...	122 40 1·2	R
17	...	48 50·43	...	40 1·7	R
683		*Taylor* 8300—1*st*.			
Aug. 20	5·0	17 51 15·18	...	120 14 16·8	R
21	5·2	51 15·30	...	14 15·8	R
24	5·0	51 15·17	...	14 16·4	R
Sep. 3	5·0	51 15·43	...	14 17·4	R
684		32 *Draconis ξ*			
Aug. 28	3·5	17 51 25·16	...	33 6 28·2	R
30	3·5	51 25·13	...	6 26·1	R
685		91 *Herculis θ*			
Aug. 29	4·0	17 52 4·08	...	52 43 54·1	R
Sep. 12	4·0	52 3·86	...	43 55·1	R
686		57 *Serpentis ζ*			
Sep. 4	5·0	17 54 2·47	...	93 40 50·3	R
687		66 *Ophiuchi*.			
Aug. 31	...	17 54 12·14	...	85 37 19·7	R
688		69 *Ophiuchi τ*			
Aug. 30	5·0	17 56 26·33	...	98 10 40·1	R
689		96 *Herculis*.			
Aug. 28	5·0	17 57 10·03	...	69 9 55·8	R
Sep. 3	5·0	57 10·23	...	9 54·9	R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
690 70 *Ophiuchi*—1*st.*					
Sep. 4	4·5	17 59 17·44	...	87 28 11·0	R
12	4·5	59 17·39	...	28 11·4	R
691 ϵ *Telescopii.*					
Aug. 13	4·5	18 2 10·36	...	135 58 21·5	R
14	4·5	2 10·33	...	58 22·8	R
16	4·5	2 10·26	...	58 23·4	R
17	...	2 10·36	...	58 25·2	R
692 *Lacaille* 7561.					
Aug. 31	5·5	18 2 32·04	...	153 42 45·8	R
693 103 *Herculis o*					
Aug. 28	4·0	18 2 46·83	...	61 15 11·7	R
29	4·0	2 46·87	...	15 10·2	R
Sep. 3	4·0	2 47·06	...	15 10·7	R
694 *Lacaille* 7577					
Aug. 19	5·0	18 4 5·53	...	153 5 4·3	R
21	5·0	4 5·48	...	5 1·1	R
23	5·0	4 5·47	...	5 2·8	R
695 13 *Sagittarii* μ^1					
Aug. 13	...	18 6 27·86	...	111 5 18·3	R
15	...	6 27·92	...	5 18·3	R
20	...	6 27·89	...	5 18·3	R
696 *Anon.*					
Aug. 26	8·4	18 6 40·70	...	123 10 19·8	R
30	8·2	6 40·64	...	10 18·7	R
Sep. 4	8·8	6 40·69	...	10 19·5	R
12	9·0	6 40·63	...	10 20·9	R
697 104 *Herculis A.*					
Aug. 29	5·0	18 7 18·64	...	58 37 24·9	R
698 *g Sagittarii.*					
Aug. 21	5·5	18 10 24·92	...	117 5 3·1	R
28	5·5	10 24·80	...	5 4·6	R
Sep. 3	5·5	10 25·03	...	5 4·0	R
699 23 *Ursæ Minoris* δ					
Aug. 19	...	18 11 41·02	3	3 23 28·8	R
23 *Ursæ Minoris* δ—*s.p.*					
Feb. 4	...	18 11 41·60	3	3 23 30·2	R
16	...	11 41·52	3	23 29·9	R
20	...	11 41·65	3	23 32·4	R
Mar. 2	...	11 41·75	3	23 32·3	R
9	...	11 41·10	3	23 30·0	M
12	...	11 41·48	3	23 33·0	M
700 *Anon.*					
Aug. 24	7·0	18 12 35·31	...	127 32 12·1	R
26	7·0	12 35·27	...	32 12·7	R
Sep. 12	7·0	12 35·25	...	32 13·4	R
701 *Radcliffe* 3885.					
Aug. 30	5·0	18 13 14·45	...	94 6 35·4	R
702 105 *Herculis.*					
Aug. 29	5·0	18 14 9·40	...	65 36 11·1	R
31	5·0	14 9·43	...	36 11·0	R
Sep. 4	5·0	14 9·58	...	36 10·2	R
703 1 *Lyræ* κ					
Aug. 28	4·5	18 15 35·02	...	54 0 22·8	R
Sep. 3	4·5	15 35·04	...	0 21·6	R
704 24 *Ursæ Minoris*—*s.p.*					
Feb. 25	...	18 15 57·77	3	3 0 44·7	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
705	*Radcliffe* 3905.				
Aug. 30	5·0	18 18 25·35	...	40 56 20·3	R
706	*Anon.*				
Aug. 14	8·0	18 19 9·45	...	121 26 26·0	R
16	8·3	19 9·55	...	26 25·4	R
707	*ν Pavonis.*				
Aug. 15	5·0	18 19 58·47	...	152 21 7·6	R
19	5·0	19 58·59	...	21 8·9	R
21	5·0	19 58·66	3	21 7·3	R
708	39 *Draconis b.*				
Aug. 28	5·0	18 22 7·54	...	31 16 10·2	R
31	5·0	22 7·65	...	16 8·9	R
Sep. 4	5·0	22 7·63	...	16 8·2	R
709	ν^1 *Sagittarii.*				
Aug. 20	5·5	18 23 4·61	...	123 4 2·4	R
23	5·5	23 4·65	...	4 2·1	R
24	5·5	23 4·64	...	4 2·4	R
Sep. 3	5·5	23 4·60	...	4 1·5	R
12	5·5	23 4·50	...	4 1·8	R
710	ν^2 *Sagittarii.*				
Aug. 29	5·5	18 25 57·38	...	123 6 16·1	R
711	1 *Aquilæ.*				
Aug. 28	...	18 28 33·97	...	98 ~~20~~ 15 38·7 ?	R
30	...	28 33·97	...	~~20~~ 37·4	R
Sep. 3	...	28 34·01	...	~~20~~ 38·0	R
4	...	28 33·96	...	~~20~~ 38·0	R
12	...	28 34·02	4	~~20~~ 40·9	R
712	*Radcliffe* 3983—2*nd*.				
Aug. 21	5·0	18 31 10·69	...	37 44 31·2	R
23	5·0	31 10·65	...	44 33·4	R
31	5·0	31 10·62	...	44 31·2	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
713	3 *Lyræ a, Vega.*				
Aug. 16	...	18 32 48·39	...	51 19 38·0	R
19	...	32 48·44	...	19 42·6	R
24	...	32 48·43	...	19 41·7	R
714	2 *Aquilæ.*				
Aug. 28	5·0	18 35 35·66	...	99 10 1·8	R
29	5·0	35 35·66	...	9 59·5	R
Sep. 3	5·5	35 35·78	...	10 1·1	R
4	5·0	35 35·69	...	10 0·3	R
18	5·0	35 35·70	...	10 2·4	R
715	*θ Pavonis.*				
Aug. 15	5·0	18 36 37·75	...	155 12 0·0	R
716	3 *Aquilæ.*				
Aug. 30	5·5	18 36 52·67	...	98 23 35·4	R
717	46 *Draconis c.*				
Sep. 4	5·0	18 40 16·53	...	34 34 57·2	R
718	5 *Lyræ* ϵ^2—1*st*.				
Aug. 29	5·0	18 40 20·02	...	50 30 49·2	R
719	110 *Herculis.*				
Aug. 21	...	18 40 24·60	...	69 34 7·2	R
23	...	40 24·61	...	34 8·7	R
24	...	40 24·66	...	34 7·2	R
Sep. 12	...	40 24·51	5	34 7·0	R
720	7 *Lyræ* ζ^2				
Aug. 31	5·5	18 40 36·24	...	52 31 54·2	R
721	6 *Aquilæ.*				
Aug. 28	...	18 40 42·07	...	94 52 36·5	R
Sep. 3	...	40 42·24	...	52 34·5	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
722		*κ Telescopii.*			
Aug. 14	5·5	18 42 58·26	...	142 14 38·0	R
723		*Radcliffe* 4070.			
Sep. 18	5·0	18 43 59·60	...	37 8 41·5	R
724		*κ Pavonis, Var.*			
Aug. 15	5·0	18 44 21·63	...	157 22 58·9	R
16	5·0	44 21·73	3	22 57·6	R
19	5·0	44 21·55	...	22 57·8	R
725		10 *Lyræ β, Var.* 1.			
Aug. 17	...	18 45 34·49	...	56 46 39·6	R
20	...	45 34·52	...	46 40·2	R
21	...	45 34·56	...	46 40·3	R
22	...	45 34·49	...	46 38·6	R
23	...	45 34·55	...	46 39·7	R
26	...	45 34·46	...	46 38·8	R
28	...	45 34·46	...	46 39·9	R
31	...	45 34·56	...	46 39·7	R
Sep. 3	...	45 34·50	...	46 39·7	R
726		35 *Sagittarii* ν^2			
Aug. 29	5·0	18 47 44·48	...	112 49 16·3	R
727		*ω Pavonis.*			
Aug. 30	5·5	18 47 45·42	...	150 21 30·0	R
728		*Radcliffe* 4109.			
Sep. 20	5·0	18 48 50·65	...	37 10 52·6	R
729		47 *Draconis o.*			
Sep. 18	5.0	18 49 23·95	...	30 45 36·6	R
21	5·0	49 24·07	...	45 35·4	R
730		113 *Herculis.*			
Sep. 4	5·0	18 49 ~~36·10~~ 35·93	...	67 30 28·7	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
731		63 *Serpentis θ*—1*st.*			
Aug. 31	4·5	18 50 9·28	...	85 57 11·5	R
732		9 *Aquilæ.*			
Aug. 20	5·5	18 50 31·73	...	96 0 9·2	R
21	5·5	50 31·67	...	0 8·7	R
22	5·5	50 31·71	...	0 10·4	R
Sep. 3	5·5	50 31·92	...	0 9·1	R
733		*R. P. L.* 131.			
Aug. 15	...	18 54 33·86	3	3 26 51·9	R
734		48 *Draconis.*			
Aug. 29	...	18 54 41·21	...	32 20 45·6	R
31	...	54 41·24	...	20 45·2	R
735		12 *Aquilæ.*			
Aug. 28	...	18 55 9·83	...	95 54 32·2	R
30	...	55 9·86	...	54 29·8	R
Sep. 4	...	55 10·11	...	54 29·9	R
20	...	55 10·05	...	54 31·5	R
21	...	55 10·08	...	54 32·1	R
736		*Lacaille* 7944.			
Sep. 2	5·5	18 56 55·80	...	158 36 32·6	R
737		17 *Aquilæ ζ*			
Aug. 22	...	18 59 48·07	...	76 18 57·1	R
24	...	59 48·10	...	18 57·2	R
30	...	59 48·04	...	18 58·1	R
Sep. 4	...	59 48·05	...	18 56·5	R
18	...	59 48·04	...	18 58·1	R
20	...	59 48·05	...	18 58·0	R
738		*β Coronæ Australis.*			
Aug. 14	5·0	19 1 37·51	...	129 31 54·0	R
16	5·0	1 37·44	...	31 55·1	R
17	...	1 37·49	...	31 55·1	R
Sep. 3	5·0	1 37·85	...	31 55·4	R
19	5·0	1 37·52	...	31 56·0	R

35·93

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
739		*τ Pavonis.*			
Aug. 15	5·5	19 3 22·12	...	159 23 37·3	R
23	5·5	3 22·09	...	23 39·4	R
26	5·5	3 22·28	...	23 38·7	R
28	5·5	3 22·19	...	23 41·2	R
Sep. 2	5·5	3 22·45	...	23 39·2	R
740		53 *Draconis.*			
Aug. 30	5·0	19 9 22·12	...	33 20 51·3	R
Sep. 2	5·0	9 22·17	...	20 53·5	R
3	5·0	9 22·10	...	20 54·3	R
18	5·0	9 21·99	...	20 53·2	R
19	5·0	9 21·87	...	20 52·9	R
741		20 *Lyræ η*—1*st.*			
Sep. 4	5·0	19 9 36·54	...	51 3 43·1	R
742		1 *Vulpeculæ.*			
Sep. 21	5·0	19 10 58·47	...	68 49 24·4	R
25	5·0	10 58·28	...	49 24·4	R
743		54 *Draconis.*			
Aug. 31	5·0	19 11 44·59	...	32 30 16·4	R
Sep. 24	5·0	11 44·65	...	30 16·8	R
744		25 *Aquilæ ω*			
Aug. 15	...	19 12 5·37	...	78 37 21·5	R
21	...	12 5·28	...	37 20·0	R
23	...	12 5·31	...	37 20·1	R
28	...	12 5·34	...	37 23·2	R
Sep. 10	...	12 5·33	...	37 18·7	R
745		21 *Lyræ θ*			
Sep. 28	...	19 12 7·84	...	52 4 57·2	R
30	...	12 7·79	...	4 56·1	R
746		1 *Cygni κ*			
Aug. 16	4·0	19 14 17·04	...	36 51 16·7	R
17	...	14 16·97	...	51 18·5	R
19	4·0	14 16·96	...	51 17·6	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
747		*a Sagittarii.*			
Aug. 14	4·0	19 15 25·76	...	130 50 34·5	R
748		47 *Sagittarii* χ^1			
Aug. 30	5·5	19 17 50·98	...	114 44 34·7	R
Sep. 4	5·5	17 50·96	...	44 36·2	R
18	5·5	17 51·14	...	44 36·4	R
20	5·5	17 51·15	...	44 36·4	R
21	5·5	17 51·14	...	44 37·3	R
749		*Taylor* 8907—2*nd.*			
Aug. 15	...	19 17 59·73	...	144 33 58·4	R
750		31 *Aquilæ b.*			
Sep. 24	5·0	19 19 9·14	...	78 18 52·3	R
25	5·0	19 9·08	...	18 52·4	R
751		30 *Aquilæ δ*			
Aug. 19	...	19 19 20·75	...	87 7 35·0	R
22	...	19 20·73	...	7 35·3	R
26	...	19 20·75	...	7 34·8	R
28	...	19 20·78	...	7 36·8	R
29	...	19 20·68	...	7 35·5	R
Sep. 2	...	19 20·81	...	7 35·6	R
3	...	19 20·79	...	7 36·9	R
10	...	19 20·69	...	7 33·3	R
12	...	19 20·70	...	7 34·9	R
19	...	19 20·75	...	7 35·6	R
752		58 *Draconis π*			
Aug. 21	...	19 20 2·31	...	24 31 9·5	R
23	...	20 2·38	...	31 11·9	R
24	...	20 2·38	...	31 11·4	R
753		32 *Aquilæ ν*			
Aug. 31	5·5	19 20 16·99	...	89 54 9·5	R
Sep. 28	5·5	20 16·84	...	54 10·9	R
30	5·5	20 16·88	...	54 9·7	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
754		10 *Cygni* ι^2			
Aug. 30	5·0	19 26 37·79	...	38 31 43·1	R
Sep. 3	5·0	26 38·00	...	31 45·8	R
18	5·0	26 37·70	...	31 43·9	R
19	5·0	26 37·80	...	31 43·9	R
20	5·0	26 37·74	...	31 43·6	R
755		37 *Aquilæ h*			
Sep. 2	5·0	19 28 23·93	...	100 49 28·5	R
12	5·0	28 23·81	...	49 28·9	R
21	5·0	28 24·10	...	49 28·3	R
Oct. 3	...	28 23·92	...	49 30·3	C.R
756		52 *Sagittarii* h^2			
Aug. 23	...	19 29 16·81	...	115 9 1·3	R
31	...	29 16·86	...	9 1·1	R
Sep. 4	...	29 16·82	...	9 0·9	R
10	...	29 16·86	...	8 58·7	R
24	...	29 16·81	...	9 2·6	R
28	...	29 16·82	...	9 1·3	R
757		61 *Draconis* σ			
Sep. 3	5·0	19 32 35·60	...	20 32 50·3	R
17	5·0	32 35·59	...	32 47·2	R
25	5·0	32 35·62	...	32 49·4	R
758		54 *Sagittarii* e^1			
Aug. 29	5·0	19 33 43·94	...	106 34 13·5	R
30	5·0	33 43·89	...	34 12·9	R
Sep. 18	5·5	33 44·01	...	34 15·3	R
20	5·5	33 43·94	...	34 14·3	R
21	5·5	33 43·91	...	34 14·6	R
759		6 *Sagittæ* β			
Aug. 28	...	19 35 34·10	...	72 48 17·6	R
Sep. 2	...	35 34·13	...	48 17·2	R
19	...	35 34·31	...	48 18·3	R
28	...	35 34·12	...	48 18·6	R
30	...	35 34·08	...	48 17·0	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
760		*Radcliffe* 4413.			
Sep. 12	5·0	19 35 56·22	5	35 18 40·8	R
27	5·0	35 56·41	...	18 39·2	R
Oct. 3	...	35 56·43	...	18 41·2	C.R
761		*Taylor* 9071.			
Aug. 31	5·5	19 38 14·04	...	122 12 2·7	R
Sep. 4	5·5	38 14·08	...	12 4·0	R
10	5·5	38 14·05	...	12 0·6	R
24	5·5	38 14·03	...	12 2·7	R
25	5·5	38 14·04	...	12 2·3	R
762		*Lacaille* 8195.			
Aug. 15	...	19 39 19·67	...	155 54 3·5	R
19	...	39 19·73	...	54 3·1	R
763		15 *Cygni*.			
Aug. 21	5·0	19 39 52·56	...	52 56 19·6	R
22	5·0	39 52·55	...	56 21·5	R
26	5·0	39 52·56	...	56 19·9	R
Sep. 3	5·0	39 52·64	...	56 21·2	R
20	5·0	39 52·66	...	56 21·4	R
764		50 *Aquilæ* γ			
Aug. 24	...	19 40 27·54	...	79 40 55·6	R
29	...	40 27·55	...	40 55·5	R
30	...	40 27·58	...	40 55·0	R
Sep. 2	...	40 27·49	...	40 56·4	R
12	...	40 27·57	...	40 55·6	R
17	...	40 27·54	...	40 56·7	R
21	...	40 27·58	...	40 56·0	R
26	...	40 27·59	...	40 56·7	R
765		*Radcliffe* 4446.			
Sep. 18	5·0	19 40 51·59	...	32 16 25·7	R
30	5·0	40 51·70	...	16 25·3	R
Oct. 2	...	40 51·63	6	16 27·2	C.R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension. 1878. h. m. s.	No. of Wires.	Mean Polar Distance. 1878. ° ′ ″	Observer.
766		17 *Cygni.*			
Sep. 19	5·0	19 41 47·94	...	56 33 17·4	R
27	5·0	41 47·85	...	33 17·2	R
767		8 *Sagittæ* ζ			
Aug. 28	5·0	19 43 33·47	...	71 9 45·1	R
31	5·0	43 33·64	...	9 43·5	R
Sep. 28	5·0	43 33·68	...	9 45·9	R
Oct. 5	...	43 33·66	...	9 47·3	C.R
768		51 *Aquilæ.*			
Sep. 4	5·5	19 44 4·20	...	101 4 13·2	R
24	5·5	44 4·01	...	4 15·8	R
Oct. 3	...	44 4·06	...	4 16·4	C.R
769		53 *Aquilæ α, Altair.*			
Sep. 23	...	19 44 49·91	...	81 27 5·6	R
Oct. 11	...	44 49·76	...	27 8·8	C.R
770		*Lacaille* 8224.			
Aug. 24	5·5	19 46 3·41	...	159 28 50·9	R
771		*Radcliffe* 4469.			
Sep. 10	5·0	19 46 25·77	...	49 42 21·9	R
772		ι *Sagittarii.*			
Aug. 14	4·5	19 46 50·25	...	132 11 11·6	R
15	4·5	46 50·19	...	11 11·9	R
16	4·5	46 50·16	...	11 11·3	R
773		*B. F.* 2695.—2*nd.*			
Sep. 20	5·5	19 46 55·73	...	93 25 43·0	R
21	5·5	46 55·69	...	25 42·7	R
774		59 *Aquilæ* ξ			
Aug. 28	5·0	19 48 20·02	...	81 51 9·7	R
30	5·0	48 20·01	...	51 9·1	R
Sep. 2	5·0	48 19·98	...	51 10·2	R
775		58 *Sagittarii* ω			
Sep. 19	5·5	19 48 21·79	...	116 37 16·9	R
Oct. 12	5·3	48 21·78	...	37 16·8	C.R
776		μ^1 *Pavonis.*			
Aug. 19	...	19 48 29·54	...	157 16 4·1	R
23	...	48 29·62	...	16 3·7	R
777		60 *Aquilæ* β			
Aug. 29	...	19 49 19·25	...	83 53 45·4	R
31	...	49 19·12	...	53 45·2	R
Sep. 12	...	49 19·25	...	53 44·8	R
17	...	49 19·18	...	53 45·0	R
24	...	49 19·20	...	53 45·6	R
26	...	49 19·17	...	53 46·2	R
27	...	49 19·19	...	53 45·2	R
778		22 *Cygni.*			
Oct. 1	...	19 51 30·02	...	51 50 13·1	C.R
779		θ^1 *Sagittarii.*			
Aug. 21	...	19 51 47·64	...	125 36 15·0	R
22	...	51 47·79	...	36 16·6	R
24	...	51 47·75	...	36 16·7	R
Sep. 4	...	51 47·67	...	36 13·8	R
28	...	51 47·64	...	36 16·9	R
780		*Taylor* 9172.			
Oct. 5	5·3	19 51 56·08	...	125 1 30·5	C.R
781		*Radcliffe* 4517.			
Sep. 3	5·0	19 52 59·87	...	49 57 32·1	R
30	5·0	52 59·80	...	57 31·0	R
782		14 *Vulpeculæ.*			
Aug. 30	...	19 53 56·50	...	67 13 45·1	R
Sep. 19	...	53 56·64	...	13 45·1	R
20	...	53 56·60	...	13 46·0	R
Oct. 3	...	53 56·47	...	13 45·7	C.R

Sep. 1

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
783	15 *Vulpeculæ.*				
Aug. 28	5·0	19 56 4·54	...	62 34 55·9	R
29	5·0	56 4·57	...	34 55·6	R
Sep. 2	5·0	56 4·53	...	34 56·8	R
18	5·0	56 4·66	...	34 54·8	R
27	5·0	56 4·52	...	34 55·4	R
784	*Taylor* 9215.				
Sep. 12	5·0	19 56 34·37	...	65 32 13·0	R
24	5·0	56 34·26	...	32 13·3	R
26	...	56 34·37	...	32 13·5	R
785	δ *Pavonis.*				
Aug. 16	...	19 56 44·02	...	156 29 27·8	R
19	4·0	56 43·96	...	29 28·3	R
786	63 *Aquilæ* τ				
Sep. 3	5·5	19 58 10·97	...	83 3 51·2	R
4	5·5	58 10·97	...	3 51·0	R
21	5·5	58 10·98	...	3 50·4	R
Oct. 12	...	58 10·71	...	3 53·1	C.R
18	5·0	58 10·79	...	3 52·9	C.R
787	64 *Draconis e.*				
Aug. 21	5·0	20 0 10·83	...	25 31 10·2	R
22	5·0	0 10·94	...	31 12·2	R
24	5·0	0 10·94	...	31 12·7	R
Sep. 17	5·0	0 10·72	...	31 12·8	R
19	5·0	0 10·86	...	31 12·3	R
788	*O. A. S.* 20269.				
Aug. 14	9·1	20 1 55·71	...	105 45 55·3	R
15	9·0	1 55·78	...	45 55·6	R
789	67 *Draconis* ρ				
Aug. 28	...	20 2 16·00	...	22 28 26·0	R
Sep. 28	...	2 15·69	...	28 26·2	R
30	...	2 15·76	...	28 25·7	R
Oct. 1	...	2 15·84	...	28 24·7	C.R
4	...	2 15·82	5	28 25·1	C.R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
790	66 *Draconis.*				
Aug. 29	5·0	20 3 36·12	...	28 21 28·1	R
30	5·0	3 36·14	...	21 28·5	R
Sep. 3	5·0	3 36·34	...	21 30·8	R
12	5·0	3 36·17	...	21 28·9	R
18	5·0	3 36·38	...	21 28·3	R
791	28 *Cygni b*^{2}.				
Aug. 31	5·0	20 4 53·88	...	53 31 5·7	R
Sep. 2	5·0	4 53·90	...	31 6·7	R
10	5·0	4 53·76	...	31 4·7	R
16	...	4 53·64	...	31 5·9	R
21	5·0	4 53·75	...	31 6·6	R
792	67 *Aquilæ* ρ				
Aug. 30	5·0	20 8 37·88	...	75 10 20·7	R
Sep. 12	5·0	8 37·61	...	10 21·6	R
17	5·0	8 37·98	...	10 21·8	R
20	5·0	8 37·87	...	10 21·4	R
24	5·0	8 37·73	...	10 23·2	R
793	*Radcliffe* 4654.				
Oct. 3	6·0	20 9 7·94	...	38 54 10·4	C.R
5	6·2	9 7·93	...	54 12·1	C.R
17	5·6	9 8·05	6	54 10·0	C.R
794	30 *Cygni* o^1				
Aug. 28	5·5	20 9 28·02	...	43 33 9·0	R
29	5·5	9 28·08	...	33 7·6	R
Sep. 28	5·5	9 27·88	...	33 9·6	R
Oct. 19	5·0	9 27·80	...	33 8·0	C.R
795	31 *Cygni* o^2				
Oct. 1	4·2	20 9 47·22	...	43 37 38·9	C.R
18	4·2	9 47·28	...	37 39·6	C.R
23	4·3	9 47·22	...	37 40·2	C.R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
796		*B. H.* 1548.			
Aug. 21	5·0	20 10 5·77	...	64 46 44·8	R
22	5·0	10 5·80	...	46 45·7	R
24	5·0	10 5·70	...	46 46·7	R
31	5·0	10 5·85	...	46 45·1	R
Sep. 3	5·0	10 5·86	...	46 46·8	R
797		33 *Cygni.*			
Sep. 18	4·5	20 10 33·49	...	33 48 16·5	R
Oct. 4	...	10 33·61	6	48 16·2	C.R
798		23 *Vulpeculæ.*			
Sep. 10	4·5	20 10 42·90	...	62 33 28·7	R
27	4·5	10 42·69	...	33 29·8	R
799		6 *Capricorni* a^2			
Sep. 2	...	20 11 16·99	...	102 55 15·3	R
4	...	11 17·02	...	55 15·1	R
16	...	11 17·20	...	55 17·9	R
19	...	11 17·01	...	55 17·1	R
21	...	11 17·07	...	55 16·1	R
25	...	11 17·07	...	55 16·5	R
26	...	11 16·99	...	55 16·7	R
30	...	11 16·99	...	55 15·0	R
Oct. 11	...	11 17·11	..	55 17·5	C.R
800		*Radcliffe* 4751.			
Sep. 10	5·0	20 18 25·59	...	49 21 45·4	R
17	5·0	18 25·44	...	21 47·0	R
18	5·0	18 25·40	...	21 46·7	R
Oct. 3	5·3	18 25·38	...	21 48·3	C.R
18	...	18 25·38	...	21 49·4	C.R
801		39 *Cygni.*			
Aug. 22	5·0	20 18 59·22	...	58 12 8·9	R
26	5·0	18 59·15	...	12 8·7	R
Sep. 12	5·0	18 59·19	...	12 9·3	R
19	5·0	18 59·38	...	12 9·4	R
20	5·0	18 59·30	...	12 9·1	R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
802		11 *Capricorni* ρ			
Sep. 3	...	20 21 53·87	...	108 12 53·6	R
17	...	21 53·95	...	12 55·9	R
18	...	21 53·94	...	12 54·8	R
24	...	21 53·92	...	12 55·5	R
25	...	21 53·96	...	12 55·3	R
27	...	21 53·94	...	12 53·9	R
28	...	21 53·96	...	12 54·9	R
30	...	21 53·99	...	12 53·8	R
Oct. 1	...	21 53·96	...	12 56·6	C.R
2	...	21 54·00	...	12 57·4	C.R
4	...	21 53·98	...	12 56·0	C.R
5	...	21 54·09	...	12 57·3	C.R
8	...	21 54·09	...	12 54·1	C.R
12	...	21 54·16	...	12 56·2	C.R
15	...	21 54·11	...	12 57·1	C.R
803		69 *Aquilæ.*			
Sep. 2	5·0	20 23 16·61	...	93 17 22·4	R
4	5·0	23 16·62	...	17 22·8	R
20	5·0	23 16·68	...	17 22·7	R
Oct. 17	5·5	23 16·44	...	17 25·7	C.R
24	4·5	23 16·48	...	17 26·2	C.R
804		41 *Cygni.*			
Sep. 12	...	20 24 24·59	...	60 2 15·3	R
19	...	24 24·80	...	2 14·8	R
21	...	24 24·70	...	2 14·8	R
Oct. 19	...	24 24·58	...	2 15·9	C.R
805		ϕ^1 *Pavonis.*			
Oct. 21	5·2	20 25 27·98	...	150 59 27·3	C.R
23	5·0	25 27·90	...	59 26·6	C.R
806		45 *Cygni* ω^2			
Sep. 10	5·0	20 26 17·02	...	41 27 25·6	R
23	...	26 16·78	...	27 27·6	R
Oct. 18	5·6	26 16·79	6	27 28·4	C.R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
807		2 *Delphini* ϵ			
Sep. 20	4·0	20 27 23·00	...	79 6 35·0	R
24	4·0	27 22·83	...	6 36·8	R
26	...	27 22·86	...	6 36·7	R
808		2 *Cephei* θ			
Oct. 3	4·0	20 27 31·71	...	27 24 55·9	C.R
809		46 *Cygni* ω^3			
Sep. 4	...	20 27 32·99	...	41 11 25·6	R
28	...	27 32·94	...	11 26·5	R
810		*R. P. L.* 143.			
Aug. 26	...	20 27 42·44	3	5 15 41·2	R
Sep. 3	...	27 43·41	3	15 40·0	R
		R. P. L. 143—*s.p.*			
Mar. 16	...	20 27 43·65	3	5 15 41·4	M
811		4 *Delphini* ζ			
Sep. 18	5·0	20 29 36·33	...	75 44 43·1	R
25	5·0	29 36·23	...	44 44·1	R
Oct. 15	...	29 36·26	...	44 44·7	C.R
812		ϕ^2 *Pavonis.*			
Sep. 2	5·5	20 29 55·66	...	150 57 17·6	R
Oct. 5	...	29 55·84	...	57 20·5	C.R
813		70 *Aquilæ.*			
Sep. 12	5·5	20 30 22·37	...	92 58 18·0	R
21	5·5	30 22·24	4	58 15·4	R
Oct. 17	5·2	30 22·34	...	58 18·2	C.R
814		υ *Pavonis.*			
Oct. 1	6·7	20 30 44·25	...	157 11 17·1	C.R
24	5·5	30 44·48	...	11 20·0	C.R
815		6 *Delphini* β			
Sep. 16	...	20 31 49·60	...	75 49 40·1	R
19	...	31 49·82	...	49 42·4	R
Oct. 4	...	31 49·56	...	49 40·3	C.R
Nov. 6	...	31 49·75	...	49 41·0	M
816		71 *Aquilæ.*			
Sep. 10	...	20 32 2·23	...	91 31 47·2	R
27	...	32 2·03	...	31 46·9	R
Oct. 19	...	32 2·28	...	31 49·5	C.R
817		8 *Delphini* θ			
Sep. 17	...	20 32 58·46	...	77 6 42·0	R
23	...	32 58·37	...	6 40·7	R
Oct. 8	...	32 58·42	...	6 43·7	C.R
21	...	32 58·27	...	6 42·8	C.R
818		1 *Aquarii.*			
Oct. 2	...	20 33 9·71	3	89 56 28·9	C.R
23	5·5	33 9·64	...	56 29·1	C.R
819		9 *Delphini* α			
Sep. 20	...	20 33 58·40	...	74 31 1·3	R
24	...	33 58·20	...	31 1·4	R
26	...	33 58·31	3	31 2·0	R
820		50 *Cygni* α, *Deneb.*			
Sep. 30	...	20 37 16·48	...	45 9 15·9	R
Oct. 11	...	37 16·30	...	9 17·0	C.R
12	...	37 16·20	...	9 16·3	C.R
15	...	37 16·28	...	9 17·7	C.R
Nov. 5	...	37 16·39	...	9 17·7	M
821		11 *Delphini* δ			
Sep. 4	4·0	20 37 45·88	...	75 21 41·4	R
12	4·0	37 45·64	...	21 41·4	R
21	4·0	37 45·98	...	21 42·9	R
Oct. 1	5·0	37 45·77	...	21 41·7	C.R
5	5·0	37 45·85	...	21 44·0	C.R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
822	16 *Capricorni* ψ				
Sep. 18	4·5	20 38 52·35	...	115 42 28·6	R
25	4·5	38 52·02	...	42 28·4	R
27	4·5	38 52·16	...	42 27·7	R
Oct. 3	5·0	38 52·21	...	42 28·8	C.R
17	4·7	38 52·17	...	42 28·8	C.R
823	*ι Microscopii*—1*st.*				
Aug. 23	5·5	20 40 12·64	...	134 25 51·4	R
30	5·5	40 12·49	...	25 52·9	R
Sep. 2	5·5	40 12·52	...	25 54·2	R
17	5·5	40 12·68	...	25 53·7	R
19	5·5	40 12·78	...	25 52·0	R
824	53 *Cygni* ϵ				
Aug. 29	3·0	20 41 16·55	...	56 29 7·3	R
Sep. 3	3·0	41 16·61	...	29 7·4	R
20	3·0	41 16·51	...	29 7·5	R
23	...	41 16·61	...	29 6·7	R
825	λ^1 *Cygni, Var* 5.				
Aug. 19	6·2	20 42 18·73	...	56 4 21·8	R
24	6·0	42 18·57	...	4 23·4	R
26	6·2	42 18·65	...	4 23·9	R
826	*Radcliffe* 4950.				
Sep. 10	5·0	20 42 19·32	...	32 51 25·1	R
28	5·0	42 19·17	...	51 27·6	R
Oct. 19	5·2	42 19·34	...	51 29·2	C.R
24	4·5	42 19·10	...	51 28·3	C.R
25	4·5	42 19·26	6	51 28·0	C.R
827	54 *Cygni* λ				
Sep. 16	5·0	20 42 39·29	...	53 57 23·9	R
Oct. 4	...	42 39·26	...	57 25·4	C.R
8	...	42 39·15	...	57 25·0	C.R
Nov. 6	5·0	42 39·18	...	57 23·2	M
828	*ι Indi.*				
Oct. 18	5·0	20 42 40·37	5·0	142 3 38·4	C.R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
829	3 *Cephei* η				
Oct. 21	4·7	20 42 48·19	...	28 38 2·6	C.R
23	4·0	42 48·18	...	38 2·0	C.R
830	18 *Capricorni* ω				
Aug. 31	...	20 44 32·19	...	117 22 26·2	R
Sep. 12	...	44 32·07	...	22 26·4	R
19	...	44 32·23	...	22 26·5	R
25	...	44 32·12	...	22 25·5	R
27	...	44 32·32	...	22 25·4	R
831	β *Indi.*				
Aug. 23	4·0	20 45 15·60	...	148 54 45·2	R
832	57 *Cygni.*				
Aug. 22	5·0	20 48 55·99	...	46 4 24·5	R
26	5·0	48 55·71	...	4 23·4	R
Sep. 4	5·0	48 55·96	...	4 24·9	R
10	5·0	48 55·74	...	4 24·2	R
17	5·0	48 55·84	...	4 26·7	R
833	32 *Vulpeculæ.*				
Sep. 16	...	20 49 21·53	...	62 24 19·1	R
18	...	49 21·61	...	24 19·5	R
19	...	49 21·58	...	24 17·4	R
20	...	49 21·60	...	24 18·9	R
21	...	49 21·55	...	24 18·7	R
23	...	49 21·55	...	24 17·9	R
Oct. 1	...	49 21·52	...	24 17·7	C.R
5	...	49 21·55	...	24 19·6	C.R
8	...	49 21·44	...	24 20·0	C.R
15	...	49 21·50	...	24 19·4	C.R
834	76 *Draconis.*				
Oct. 17	...	20 51 19·27	5	7 55 21·3	C.R
19	...	51 19·14	3	55 19·1	C.R

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
835		58 *Cygni* ν			
Sep. 12	4·0	20 52 37·16	...	49 18 4·8	R
25	4·0	52 37·23	...	18 4·2	R
30	4·0	52 37·46	...	18 4·5	R
Oct. 2	...	52 37·41	6	18 4·9	C.R
23	4·4	52 37·39	...	18 4·6	C.R
836		χ *Cephei.*			
Aug. 29	...	20 53 1·26	...	33 34 52·5	R
31	...	53 1·30	...	34 53·0	R
Sep. 2	...	53 1·36	...	34 54·6	R
27	...	53 1·14	...	34 53·9	R
28	...	53 1·03	...	34 55·4	R
837		*Radcliffe* 5066.			
Oct. 18	5·0	20 53 4·80	5	9 54 22·8	C.R
21	6·0	53 3·61	5	54 21·3	C.R
838		1 *Piscis Australis.*			
Aug. 30	5·5	20 53 48·39	...	122 43 58·2	R
Sep. 24	5·5	53 48·12	...	43 59·1	R
Oct. 24	4·8	53 48·22	...	43 58·4	C.R
Nov. 6	5·5	53 48·36	...	43 57·1	M
839		22 *Capricorni* η			
Sep. 10	5·0	20 57 27·57	...	110 20 6·3	R
17	5·0	57 27·65	...	20 9·4	R
Oct. 3	5·0	57 27·62	...	20 10·6	C.R
15	5·2	57 27·58	...	20 10·3	C.R
840		12 *Aquarii.*			
Sep. 16	6·5	20 57 37·42	...	96 18 17·0	R
28	5·5	57 37·58	...	18 16·9	R
Oct. 5	6·3	57 37·48	...	18 18·9	C.R
25	6·0	57 37·36	...	18 17·9	C.R
Nov. 5	...	57 37·21	...	18 16·9	M
841		η *Microscopii.*			
Sep. 2	5·5	20 58 28·78	...	131 52 17·7	R
20	5·5	58 28·96	...	52 15·6	R
Oct. 1	6·0	58 28·85	...	52 15·8	C.R
26	...	58 28·89	5	52 16·0	C.R
842		2 *Piscis Australis.*			
Aug. 31	5·5	20 58 57·01	...	122 49 38·9	R
Sep. 18	5·5	58 57·25	...	49 39·6	R
19	5·5	58 57·17	...	49 39·4	R
23	...	58 56·93	...	49 37·9	R
27	5·5	58 56·90	...	49 39·9	R
843		24 *Capricorni* A.			
Sep. 12	...	20 59 59·27	...	115 29 30·1	R
24	...	59 59·25	...	29 31·4	R
Oct. 17	...	59 59·37	...	29 30·4	C.R
19	...	59 59·49	...	29 32·0	C.R
844		62 *Cygni* ξ			
Aug. 29	4·0	21 0 29·60	...	46 33 26·7	R
Sep. 25	4·0	0 29·42	...	33 27·6	R
Oct. 4	...	0 29·49	...	33 27·9	C.R
845		25 *Capricorni* χ			
Aug. 30	5·5	21 1 34·23	...	111 40 56·1	R
Oct. 2	5·2	1 34·22	...	40 58·2	C.R
21	5·8	1 34·19	...	40 57·2	C.R
29	...	1 34·10	5	40 58·5	C.R
846		*o Pavonis.*			
Oct. 18	6·0	21 1 52·50	...	160 37 23·7	C.R
847		63 *Cygni f*^{2}.			
Sep. 4	5·0	21 2 24·20	...	42 50 26·5	R
Oct. 23	5·0	2 23·94	...	50 28·9	C.R
848		5 *Equulei* γ			
Sep. 2	5·0	21 4 24·57	...	80 21 30·0	R
10	5·0	4 24·56	...	21 29·5	R
17	5·0	4 24·57	...	21 31·1	R
Oct. 5	...	4 24·57	...	21 33·3	C.R
15	5·3	4 24·43	...	21 32·2	C.R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
849		64 *Cygni* ζ			
Sep. 16	...	21 7 44·50	...	60 16 21·1	R
20	...	7 44·61	...	16 20·5	R
23	...	7 44·61	...	16 20·7	R
27	...	7 44·58	...	16 19·8	R
Oct. 8	...	7 44·62	...	16 22·6	C.R
12	...	7 44·52	...	16 22·5	C.R
Nov. 5	...	7 44·57	...	16 20·3	M
12	...	7 44·75	...	16 21·9	M
850		7 *Equulei* δ			
Sep. 10	4·5	21 8 32·42	5	80 29 7·4	R
18	4·5	8 32·48	...	29 10·7	R
30	4·5	8 32·28	...	29 10·3	R
Oct. 24	5·2	8 32·24	...	29 10·1	C.R
26	...	8 32·27	...	29 11·3	C.R
851		*Radcliffe* 5151.			
Sep. 17	5·0	21 8 41·77	...	30 30 52·6	R
24	5·0	8 41·46	...	30 52·5	R
Oct. 23	7·2	8 41·54	5	30 51·4	C.R
25	6·0	8 41·69	...	30 53·0	C.R
Nov. 8	5·7	8 41·81	...	30 54·1	M
852		*Anon.*			
Oct. 3	10·5	21 9 4·20	4	110 46 38·3	C.R
853		8 *Equulei* α			
Sep. 4	4·5	21 9 43·66	...	85 15 17·3	R
25	4·5	9 43·37	...	15 18·6	R
Oct. 19	5·2	9 43·48	...	15 20·9	C.R
854		65 *Cygni* τ			
Oct. 1	4·7	21 9 55·17	...	52 28 25·8	C.R
17	4·8	9 55·10	...	28 27·4	C.R
21	4·8	9 55·10	6	28 27·2	C.R

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
855		4 *Piscis Australis.*			
Sep. 2	...	21 10 32·27	...	122 40 48·7	R
28	...	10 32·02	...	40 53·2	R
Oct. 2	...	10 32·21	...	40 53·9	C.R
Nov. 6	...	10 32·28	...	40 51·0	M
9	...	10 32·21	...	40 50·7	M
856		67 *Cygni* σ			
Oct. 4	...	21 12 37·25	...	51 6 57·6	C.R
15	...	12 37·28	...	6 58·4	C.R
Nov. 11	...	12 37·56	...	6 57·3	M
857		66 *Cygni* υ			
Sep. 19	4·5	21 12 54·21	...	55 36 52·5	R
27	4·5	12 54·10	...	36 51·0	R
Oct. 5	5·5	12 54·02	...	36 53·8	C.R
18	5·0	12 53·93	...	36 54·6	C.R
22	5·2	12 53·96	6	36 52·2	C.R
858		6 *Cephei.*			
Sep. 17	5·0	21 16 50·14	...	25 38 41·1	R
18	5·0	16 50·08	...	38 42·4	R
20	5·0	16 50·03	...	38 41·8	R
Oct. 23	5·2	16 49·90	...	38 42·1	C.R
25	5·5	16 50·13	...	38 42·3	C.R
859		36 *Capricorni* b.			
Sep. 4	...	21 21 46·11	...	112 20 11·6	R
18	...	21 46·03	...	20 14·3	R
23	...	21 45·96	...	20 12·3	R
Oct. 3	...	21 46·16	...	20 15·0	C.R
15	...	21 45·98	...	20 14·7	C.R
860		*Anon.*			
Oct. 17	9·2	21 22 14·08	6	147 29 21·8	C.R
18	9·5	22 14·17	...	29 20·9	C.R
Nov. 8	9·4	22 13·72	...	29 20·7	M
9	9·5	22 13·83	...	29 20·6	M

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
861		*Taylor* 9975.			
Sep. 20	5·5	21 24 22·51	...	131 42 55·3	R
24	5·5	24 22·26	...	42 56·2	R
Oct. 1	5·5	24 22·26	...	42 54·4	C.R
21	6·0	24 22·21	...	42 57·8	C.R
26	...	24 22·21	6	42 57·4	C.R
862		71 *Cygni g.*			
Sep. 17	5·0	21 24 56·79	...	43 59 47·9	R
19	5·0	24 56·79	...	59 46·7	R
Oct. 5	6·0	24 56·78	...	59 48·6	C.R
Nov. 6	5·2	24 57·01	...	59 47·3	R
863		*Radcliffe* 5252.			
Oct. 25	8·0	21 25 6·47	...	44 6 28·7	C.R
864		22 *Aquarii* β			
Sep. 25	...	21 25 7·94	...	96 6 26·0	R
28	...	25 8·03	...	6 24·6	R
Oct. 2	...	25 8·08	...	6 26·0	C.R
4	...	25 8·07	...	6 24·2	C.R
29	...	25 8·01	...	6 26·0	C.R
Nov. 2	...	25 8·05	...	6 24·8	C.R
5	...	25 8·07	...	6 24·3	M
865		*Radcliffe* 5280.			
Sep. 23	...	21 27 38·10	...	30 4 41·9	R
27	5·0	27 38·06	...	4 40·8	R
Oct. 23	6·2	27 38·10	...	4 40·7	C.R
Nov. 11	5·5	27 38·21	...	4 41·8	M
12	5·8	27 38·28	...	4 41·2	M
866		8 *Piscis Australis.*			
Sep. 18	5·5	21 29 6·31	...	116 42 51·8	R
20	5·5	29 6·30	...	42 52·2	R
Oct. 15	...	29 6·42	...	42 54·0	C.R
Nov. 14	5·7	29 6·47	...	42 51·6	M
867		73 *Cygni* ρ			
Sep. 24	4·5	21 29 23·37	...	44 56 48·3	R
28	4·5	29 23·25	...	56 50·0	R
Oct. 18	4·7	29 23·43	...	56 49·4	C.R
22	...	29 23·37	...	56 49·6	C.R
868		4 *Pegasi.*			
Sep. 17	...	21 32 25·59	4	84 46 38·9	R
19	...	32 25·59	...	46 38·5	R
Oct. 1	...	32 25·42	...	46 39·3	C.R
4	...	32 25·35	...	46 40·2	C.R
19	...	32 25·33	...	46 40·8	C.R
869		9 *Cephei.*			
Oct. 3	5·0	21 34 38·94	5	28 28 3·0	C.R
17	5·3	34 38·85	...	28 2·3	C.R
23	5·3	34 38·69	5	28 3·3	C.R
Nov. 6	5·0	34 38·90	...	28 3·9	M
9	5·4	34 39·23	...	28 4·1	M
870		80 *Cygni* π^1			
Sep. 18	4·5	21 37 45·76	...	39 21 59·3	R
20	4·5	37 45·74	...	21 59·0	R
Oct. 2	5·7	37 45·66	6	22 0·8	C.R
22	5·8	37 45·78	...	22 0·1	C.R
26	...	37 45·80	...	22 0·0	C.R
871		8 *Pegasi* ϵ			
Oct. 5	...	21 38 11·57	...	80 41 1·2	C.R
29	...	38 11·64	...	41 0·8	C.R
Nov. 2	...	38 11·69	4	41 1·4	C.R
872		78 *Cygni* μ—1st.			
Sep. 19	5·0	21 38 41·26	...	61 48 27·1	R
27	5·0	38 40·97	...	48 25·7	R
Oct. 18	5·0	38 41·20	...	48 28·2	C.R
Nov. 8	5·5	38 41·26	5	48 27·3	M
11	5·4	38 41·03	...	48 27·9	M

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873		*μ Cygni—2nd.*			
Oct. 1	...	21 38 41·34	...	61 48 28·1	C.R
19	...	38 41·50	6	48 29·0	C.R
25	...	38 41·49	...	48 27·6	C.R
874		9 *Pegasi.*			
Sep. 24	4·5	21 38 43·96	...	73 12 31·2	R
30	4·5	38 44·17	4	12 29·7	R
Oct. 21	5·0	38 48·94	...	12 31·9	C.R
875		10 *Pegasi κ*			
Sep. 23	...	21 39 7·10	...	64 54 54·2	R
28	4·0	39 7·25	...	54 54·6	R
Oct. 24	4·7	39 7·12	...	54 54·0	C.R
876		11 *Cephei.*			
Nov. 14	4·6	21 40 7·88	...	19 14 59·6	M
877		10 *Cephei ν*			
Sep. 21	4·5	21 41 55·75	...	29 26 29·7	R
878		81 *Cygni* π^2			
Oct. 4	...	21 42 16·98	...	41 15 16·1	C.R
879		14 *Pegasi.*			
Sep. 27	5·0	21 44 26·71	...	60 23 35·0	R
30	5·0	44 26·77	...	23 34·3	R
Oct. 21	5·0	44 26·78	...	23 36·4	C.R
23	5·0	44 26·70	...	23 34·3	C.R
880		*ν Cephei, var* 5.			
Sep. 18	5·0	21 44 51·40	...	20 24 51·9	R
19	5·0	44 51·32	...	24 51·5	R
Oct. 17	8·2	44 51·80	6	24 52·7	C.R
22	9·0	44 51·44	...	24 52·9	C.R
Nov. 6	7·8	44 51·88	...	24 51·8	M
881		16 *Pegasi.*			
Oct. 2	...	21 47 30·62	...	64 38 53·1	C.R
3	...	47 30·66	...	38 52·4	C.R
882		30 *Aquarii.*			
Sep. 21	5·0	21 56 51·49	...	97 6 37·9	R
25	5·5	56 51·32	...	6 39·7	R
27	5·5	56 51·37	...	6 38·9	R
Oct. 21	5·7	56 51·27	...	6 40·7	C.R
24	...	56 51·40	...	6 38·9	C.R
883		16 *Cephei.*			
Oct. 1	...	21 57 29·91	5	17 24 0·9	C.R
8	...	57 29·75	...	24 2·3	C.R
22	5·0	57 29·94	...	24 3·5	C.R
Nov. 8	5·0	57 30·28	...	24 3·0	M
9	5·2	57 30·34	...	24 1·3	M
884		*Anon.*			
Sep. 24	10·0	21 57 50·26	...	92 31 10·4	R
28	10·4	57 50·33	4	31 7·6	R
Oct. 23	9·9	57 50·45	...	31 10·2	C.R
885		34 *Aquarii α*			
Oct. 3	...	21 59 30·94	...	90 54 42·7	C.R
29	...	59 31·04	...	54 43·9	C.R
Nov. 2	...	59 30·92	...	54 43·4	C.R
6	...	59 30·99	...	54 41·7	M
21	...	59 31·05	...	54 43·1	M
886		18 *Cephei.*			
Oct. 17	5·5	22 0 13·74	...	27 28 24·1	C.R
Nov. 11	5·4	0 13·97	...	28 24·0	M
14	5·5	0 13·75	...	82 23·7	M
887		24 *Pegasi ι*			
Oct. 24	4·0	22 1 19·87	5	65 15 0·5	C.R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
888		35 *Aquarii.*			
Sep. 25	5·5	22 2 17·15	...	109 6 57·0	R
27	5·5	2 17·16	...	6 56·1	R
889		15 *Piscis Australis.*			
Oct. 19	4·7	22 2 59·87	5	123 8 48·9	C.R
890		27 *Pegasi* π^1			
Oct. 21	5·5	22 3 49·23	...	57 25 23·9	C.R
891		29 *Pegasi* π^2			
Sep. 24	4·0	22 4 33·93	...	57 25 11·1	R
Oct. 22	...	4 34·08	...	25 11·2	C.R
25	4·3	4 34·08	...	25 12·3	C.R
892		*Radcliffe* 5591.			
Oct. 23	5·5	22 6 25·30	...	39 46 43·9	C.R
893		21 *Cephei* ζ			
Oct. 18	3·7	22 6 37·27	...	32 23 59·3	C.R
894		24 *Cephei.*			
Oct. 17	4·8	22 7 27·47	5	18 15 33·5	C.R
24	4·9	7 27·28	6	15 35·0	C.R
Nov. 9	5·0	7 28·19	...	15 33·5	M
895		μ^1 *Gruis*			
Nov. 12	5·1	22 8 15·52	...	131 57 12·0	M
896		43 *Aquarii* θ			
Oct. 1	...	22 10 23·71	...	98 23 22·6	C.R
4	...	10 23·58	...	23 23·7	C.R
26	...	10 23·69	...	23 23·6	C.R
Nov. 6	...	10 23·76	...	23 23·0	M
897		23 *Cephei* ϵ			
Nov. 8	4·6	22 10 32·91	...	33 33 53·2	M
21	4·9	10 32·96	...	33 52·1	M
898		1 *Lacertæ.*			
Nov. 11	...	22 10 39·23	...	52 51 30·5	M
899		46 *Aquarii* ρ			
Nov. 26	5·7	22 13 46·78	...	98 25 59·0	M
900		30 *Pegasi.*			
Nov. 27	5·4	22 14 19·28	...	84 49 20·7	M
901		δ *Tucanæ.*			
Nov. 12	5·0	22 18 38·29	...	155 35 11·8	M
902		3 *Lacertæ* β			
Nov. 28	4·5	22 18 45·98	...	38 22 52·6	M
903		4 *Lacertæ.*			
Nov. 8	...	22 19 34·30	...	41 8 30·3	M
11	...	19 34·41	...	8 29·5	M
25	...	19 34·38	...	8 29·0	M
904		*R. P. L.* 150.			
Sep. 24	...	22 22 45·24	3	4 30 24·9	R
Oct. 8	...	22 45·39	3	30 24·4	C.R
17	...	22 45·71	3	30 23·5	C.R
22	...	22 45·72	3	30 25·1	C.R
Nov. 6	...	22 44·41	3	30 25·0	M
9	...	22 46·48	3	30 22·4	M
14	...	22 45·49	3	30 24·9	M
15	...	22 45·83	3	30 24·8	M
21	...	22 44·73	3	30 23·9	M
		R. P. L. 150—*s.p.*			
Mar. 28	...	22 22 44·97	3	4 30 25·3	M
28	...	22 45·84	3	30 26·8	M
Apl. 2	...	22 45·97	3	30 25·8	M
6	...	22 45·65	3	30 28·0	R
10	...	22 45·64	3	30 27·6	R
22	...	22 45·34	3	30 24·0	R
27	...	22 45·80	3	30 26·6	R
May 8	...	22 44·90	3	30 27·0	R

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
905		*B. F.* 3091.			
Nov. 26	5·8	22 28 53·70	...	114 37 16·4	M
28	5·7	28 53·55	...	37 15·6	M
906		62 *Aquarii* η			
Oct. 17	...	22 29 5·14	...	90 44 45·3	C.R
18	...	29 5·13	...	44 44·6	C.R
19	...	29 5·28	...	44 44·3	C.R
21	...	29 5·24	...	44 45·1	C.R
22	...	29 5·19	...	44 45·6	C.R
23	...	29 5·09	...	44 45·4	C.R
24	...	29 5·18	...	44 44·2	C.R
Nov. 11	...	29 5·15	...	44 47·0	M
22	...	29 5·24	...	44 45·8	M
907		31 *Cephei*.			
Nov. 12	5·4	22 32 45·56	...	16 59 ~~14·7~~	M
14	5·3	32 45·56	...	59 14·7	M
908		30 *Cephei*.			
Nov. 15	5·4	22 34 19·94	...	27 2 55·0	M
21	5·5	34 19·89	...	2 54·6	M
909		42 *Pegasi* ζ			
Oct. 3	...	22 35 22·61	...	79 48 17·5	C.R
18	...	35 22·58	...	48 18·1	C.R
19	...	35 22·50	...	48 18·8	C.R
22	...	35 22·61	...	48 17·5	C.R
23	...	35 22·56	...	48 18·3	C.R
24	...	35 22·55	...	48 18·0	C.R
25	...	35 22·51	...	48 18·4	C.R
26	...	35 22·57	...	48 18·1	C.R
Nov. 6	...	35 22·39	...	48 15·0	M
8	...	35 22·59	...	48 18·0	M
910		43 *Pegasi o*			
Nov. 9	...	22 36 1·88	...	61 19 43·7	M
27	...	36 2·04	...	19 43·5	M
911		η *Gruis*.			
Nov. 28	5·0	22 38 7·97	...	144 8 27·8	M

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
912		46 *Pegasi* ξ			
Nov. 11	...	22 40 35·85	...	78 27 7·3	M
913		47 *Pegasi* λ			
Nov. 26	...	22 40 39·52	...	67 4 32·1	M
914		*Radcliffe* 5847.			
Nov. 14	5·8	22 44 44·~~60~~ 39	...	34 44 40·1	M
25	5·3	44 44·~~78~~ 43	...	44 36·8	M
915		*Radcliffe* 5864.			
Nov. 8	5·4	22 46 ~~37·12~~ 6·97	...	28 57 5·2	M
27	4·5	46 37·~~30~~ 13	...	57 4·6	M
916		23 *Piscis Australis* δ			
Nov. 12	5·4	22 49 11·46	...	123 11 30·2	M
21	5·6	49 11·45	...	11 30·4	M
917		24 *Piscis Australis* α, *Fomalhaut*.			
Oct. 19	...	22 50 54·28	...	120 16 8·2	C.R
Nov. 22	...	50 54·16	...	16 6·3	M
918		ζ *Gruis*.			
Nov. 11	5·0	22 53 40·00	...	143 24 28·7	M
15	5·0	53 39·98	...	24 28·4	M
919		π *Piscis Australis*.			
Nov. 9	5·7	22 56 44·42	...	125 24 30·1	M
25	5·4	56 44·56	...	24 31·4	M
920		54 *Pegasi* α, *Markab*.			
Oct 18	...	22 58 41·02	...	75 27 3·6	C.R
19	...	58 40·95	...	27 3·3	C.R
21	...	58 40·94	...	27 3·7	C.R
22	...	58 40·91	...	27 4·7	C.R
24	...	58 40·97	...	27 3·1	C.R
25	...	58 41·00	...	27 3·4	C.R
26	...	58 40·97	...	27 3·9	C.R
Nov. 8	...	58 41·00	...	27 3·9	M
14	...	58 41·15	...	27 4·7	M
16	...	58 41·08	...	27 3·8	M

23·2
22·9

44·39
44·49

36·97
37·13

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Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
921		*Radcliffe* 5944.			
Nov. 27	4·9	22 58 54·69	...	23 26 52·0	M
28	4·5	58 54·65	...	26 52·2	M
922		*θ Gruis.*			
Nov. 21	5·0	23 0 0·06	...	134 10 43·8	M
923		89 *Aquarii* c^2.			
Nov. 22	...	23 3 23·95	...	113 7 5·9	M
924		7 *Andromedæ.*			
Nov. 11	5·2	23 6 57·89	...	41 15 36·0	M
15	5·2	6 57·84	...	15 36·3	M
925		*Lacaille* 9412.			
Nov. 12	5·9	23 9 36·54	...	152 39 58·2	M
926		*γ Tucanæ.*			
Nov. 14	4·3	23 10 18·15	...	148 54 18·1	M
927		92 *Aquarii* χ			
Nov. 25	5·4	23 10 31·52	...	98 23 31·4	M
27	5·4	10 31·27	...	23 30·7	M
928		6 *Piscium* γ			
Oct. 17	...	23 10 50·36	...	87 23 3·2	C.R
21	...	10 50·36	...	23 4·0	C.R
23	...	10 50·40	...	23 2·2	C.R
25	...	10 50·46	...	23 2·5	C.R
Nov. 16	...	10 50·39	...	23 1·5	M
26	...	10 50·40	...	23 3·5	M
929		8 *Andromedæ.*			
Nov. 21	5·4	23 12 5·70	...	41 39 2·9	M
930		γ *Sculptoris.*			
Nov. 28	5·0	23 12 13·83	...	123 11 47·6	M
931		62 *Pegasi* τ			
Nov. 9	...	23 14 36·09	...	66 55 38·8	M
932		98 *Aquarii* b^1.			
Nov. 8	...	23 16 33·62	...	110 46 0·6	M
11	...	16 33·65	...	46 1·1	M
933		4 *Cassiopeiæ.*			
Nov. 15	5·0	23 19 25·68	...	28 23 10·4	M
934		99 *Aquarii* b^2.			
Nov. 22	...	23 19 37·90	...	111 18 35·4	M
27	...	19 38·12	...	18 37·7	M
935		8 *Piscium* κ			
Oct. 17	...	23 20 40·67	...	89 24 44·0	C.R
Nov. 16	...	20 40·60	...	24 44·9	M
25	...	20 40·65	...	24 43·5	M
936		70 *Pegasi q.*			
Nov. 14	5·2	23 22 59·14	...	77 54 44·4	M
937		*Radcliffe* 6092.			
Nov. 21	5·2	23 24 24·19	...	32 7 23·9	M
26	5·4	24 24·24	...	7 24·4	M
938		β *Sculptoris.*			
Nov. 11	5·4	23 26 25·99	...	128 29 33·2	M
12	5·0	26 25·86	...	29 33·3	M
939		101 *Aquarii* b^4.			
Nov. 28	5·0	23 26 53·39	...	111 35 21·8	M
940		*R. P. L.* 158—*s.p.*			
May 15	...	23 27 49·27	3	3 22 1·8	R
20	...	27 48·95	3	22 0·4	M

Separate Results of Madras Meridian Circle Observations in 1878.

Number and Date.	Magnitude.	Mean Right Ascension 1878. h. m. s.	No. of Wires.	Mean Polar Distance 1878. ° ′ ″	Observer.
941		*ι Phœnicis.*			
Nov. 9	5·2	23 28 30·58	...	133 17 22·7	M
942		16 *Andromedæ* λ			
Nov. 8	...	23 31 35·68	...	44 12 11·2	M
943		*θ Phœnicis—2nd.*			
Nov. 25	5·7	23 32 54·61	...	137 18 54·1	M
944		17 *Piscium* ι			
Nov. 21	...	23 33 40·30	...	85 2 5·0	M
27	...	33 40·49	...	2 4·5	M
29	...	33 40·49	...	2 4·7	M
Dec. 2	...	33 40·56	...	2 4·5	R
945		19 *Andromedæ* κ			
Nov. 14	4·6	23 34 24·08	...	46 20 28·8	M
946		103 *Aquarii* A^1.			
Dec. 6	5·1	23 35 14·82	...	108 42 5·3	R
947		104 *Aquarii* A^2.			
Nov. 16	...	23 35 25·69	...	108 29 34·0	M
948		105 *Aquarii* ω^2			
Nov. 11	...	23 36 23·60	...	105 13 9·7	M
28	...	36 23·56	...	13 9·1	M
949		78 *Pegasi.*			
Nov. 15	...	23 37 51·29	...	61 18 51·2	M
950		20 *Andromedæ* ψ			
Nov. 22	5·5	23 39 59·51	...	44 15 25·4	M
951		5 *Cassiopeiæ* τ			
Dec. 6	5·2	23 41 5·74	...	32 1 40·0	M
952		δ *Sculptoris.*			
Nov. 20	...	23 42 34·09	...	118 48 17·1	M
953		*Radcliffe* 6215.			
Nov. 8	6·6	23 48 55·21	...	16 16 6·8	M
9	7·0	48 55·41	...	16 7·4	M
11	7·3	48 55·24	...	16 8·5	M
954		*η Tucanæ.*			
Nov. 12	5·0	23 51 10·27	...	154 58 32·6	M
14	5·0	51 10·18	...	58 32·7	M
Dec. 6	5·2	51 10·24	...	58 32·6	R
955		27 *Piscium.*			
Nov. 21	...	23 52 25·63	...	94 13 56·8	M
22	...	52 25·64	...	13 57·7	M
956		π *Phœnicis.*			
Nov. 25	5·5	23 52 35·98	...	143 25 38·5	M
26	5·4	52 36·14	...	25 37·9	M
957		28 *Piscium* ω			
Nov. 28	...	23 53 2·74	...	83 48 42·1	M
Dec. 2	...	53 2·77	...	48 41·5	R
958		ϵ *Tucanæ.*			
Nov. 27	5·0	23 53 34·03	...	156 15 22·3	M
959		ζ *Sculptoris.*			
Nov. 16	6·0	23 56 4·52	...	120 24 0·7	M
960		*Radcliffe* 6297.			
Nov. 15	6·0	23 58 48·53	...	29 21 56·0	M

MEAN POSITIONS OF STARS

OBSERVED WITH THE

MADRAS MERIDIAN CIRCLE

IN THE YEAR

1878

REDUCED TO JANUARY 1 OF THAT YEAR

Mean Positions of Stars for 1878, *January* 1*st*.

Number	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
1	21 Andromedæ α(*Alpherat*)	2·1	...	0	2	5·00	61	35	0·3	4	0·89
2	22 Andromedæ	4·9	...	0	3	59·06	44	36	23·6	2	0·90
3	κ^2 Sculptoris	5·7	2	0	5	22·58	118	28	45·4	2	0·90
4	88 Pegasi γ (*Algenib*) ...	3·0	...	0	6	57·27	75	29	41·1	2	0·89
5	7 Ceti	4·6	...	0	8	26·48	109	36	32·6	1	0·85
6	ζ Tucanæ	5·0	2	0	13	42·47	155	35	32·0	2	0·88
7	π Tucanæ	4·9	1	0	14	58·91	160	18	9·8	1	0·87
8	ι Sculptoris	5·5	5	0	15	23·36	119	39	22·4	5	0·91
9	η Sculptoris	5·3	1	0	21	52·71	123	40	52·9	1	0·85
10	Taylor 107	6·0	3	0	23	24·13	131	20	25·2	3	0·93
11	12 Ceti	6·2	...	0	23	48·82	94	37	52·5	1	0·94
12	λ^1 Phœnicis	5·3	1	0	25	31·76	139	28	42·4	1	0·87
13	15 Cassiopeiæ κ—1st ...	4·2	...	0	26	4·65	27	44	29·2	1	0·89
14	Taylor 139...	5·5	1	0	27	38·88	120	13	50·3	1	0·90
15	λ^2 Phœnicis	5·5	1	0	29	51·81	138	40	12·6	1	0·89
16	17 Cassiopeiæ ζ	3·7	...	0	30	10·74	36	46	28·5	1	0·95
17	29 Andromedæ π... ...	4·4	...	0	30	21·91	56	57	9·9	1	0·93
18	Radcliffe 172	5·0	3	0	32	25·81	41	18	58·8	3	0·90
19	Lacaille 172	5·5	1	0	34	42·29	150	8	25·6	1	0·87
20	20 Cassiopeiæ π	5·0	...	0	36	43·03	43	38	34·3	1	0·95
21	λ^1 Sculptoris	5·4	1	0	36	50·55	129	7	58·2	1	0·95
22	16 Ceti β	2·1	...	0	37	27·77	108	39	21·9	5	0·89
23	η Phœnicis	5·0	1	0	37	52·01	148	7	57·6	1	0·89
24	λ^2 Sculptoris	5·2	1	0	38	17·93	129	5	38·7	1	0·96
25	34 Andromedæ ζ... ...	4·4	...	0	40	52·28	66	23	48·1	2	0·90
26	35 Andromedæ ν... ...	4·4	...	0	43	5·30	49	35	9·3	1	0·89
27	19 Ceti ϕ^2...	5·3	...	0	44	0·84	101	18	5·4	3	0·95
28	ρ Phœnicis	5·6	3	0	45	7·73	141	39	11·0	3	0·89
29	Radcliffe 247	5·4	1	0	48	9·44	41	59	0·2	2	0·95
30	37 Andromedæ α... ...	3·9	...	0	49	58·94	52	9	45·7	3	0·92
31	38 Andromedæ η... ...	4·6	...	0	50	41·46	67	14	28·6	2	0·94
32	α Sculptoris	5·1	4	0	52	43·64	120	1	2·0	4	0·93
33	71 Piscium ϵ	4·5	...	0	56	36·77	82	46	1·3	9	0·93
34	ω Phœnicis	5·8	3	0	56	52·03	147	39	35·5	3	0·94
35	30 Cassiopeiæ μ	5·2	...	1	0	9·72	35	40	45·0	2	0·87

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
1	21 Andromedæ α ...	+ 3·0788	+ 0·0182	+ 0·010	− 20·054	+ 0·013	+ 0·16	3215
2	22 Andromedæ ...	+ 3·0958	+ 0·0328	+ 0·002	− 20·052	+ 0·017	− 0·02	3220
3	κ² Sculptoris... ...	+ 3·0553	− 0·0138	...	− 20·048	+ 0·019	...	...
4	88 Pegasi γ	+ 3·0827	+ 0·0100	− 0·001	− 20·045	+ 0·022	+ 0·01	1
5	7 Ceti...	+ 3·0548	− 0·0082	− 0·003	− 20·041	+ 0·025	+ 0·06	4
6	ζ Tucanæ	+ 2·8963	− 0·0555	+ 0·265	− 20·019	+ 0·034	− 1·18	Stone
7	π Tucanæ	+ 2·8283	− 0·0673	...	− 20·012	+ 0·036	...	...
8	ι Sculptoris	+ 3·0212	− 0·0137	...	− 20·009	+ 0·038	...	...
9	η Sculptoris	+ 2·9873	− 0·0156	...	− 19·962	+ 0·050	...	...
10	Taylor 107	+ 2·9524	− 0·0208	...	− 19·949	+ 0·053	...	...
11	12 Ceti	+ 3·0610	+ 0·0008	− 0·000	− 19·946	+ 0·055	+ 0·01	38
12	λ¹ Phœnicis	+ 2·8984	− 0·0274	...	− 19·930	+ 0·056	...	...
13	15 Cassiopeiæ κ—1st..	+ 3·3609	+ 0·0702	+ 0·000	− 19·925	+ 0·064	+ 0·02	43
14	Taylor 139	+ 2·9785	− 0·0128	...	− 19·909	+ 0·061	...	...
15	λ² Phœnicis	+ 2·8747	− 0·0257	...	− 19·884	+ 0·063	...	...
16	17 Cassiopeiæ ζ ...	+ 3·3071	+ 0·0491	+ 0·002	− 19·881	+ 0·072	+ 0·01	52
17	29 Andromedæ π ...	+ 3·1872	+ 0·0243	− 0·000	− 19·879	+ 0·070	0·00	53
18	Radcliffe 172... ...	+ 3·2867	+ 0·0419	...	− 19·854	+ 0·076	...	...
19	Lacaille 172	+ 2·7209	− 0·0357	...	− 19·825	+ 0·069	...	...
20	2 Cassiopeiæ π ...	+ 3·2959	+ 0·0392	− 0·003	− 19·797	+ 0·085	+ 0·02	67
21	λ¹ Sculptoris ...	+ 2·8982	− 0·0173	...	− 19·796	+ 0·075	...	...
22	16 Ceti β	+ 2·9988	− 0·0055	+ 0·015	− 19·787	+ 0·080	− 0·03	70
23	η Phœnicis	+ 2·7185	− 0·0324	...	− 19·781	+ 0·073	...	...
24	λ² Sculptoris ...	+ 2·8916	− 0·0170	...	− 19·775	+ 0·078	...	...
25	34 Andromedæ ζ ...	+ 3·1759	+ 0·0179	− 0·009	− 19·737	+ 0·090	+ 0·07	78
26	35 Andromedæ ν ...	+ 3·2850	+ 0·0326	− 0·001	− 19·700	+ 0·097	+ 0·01	87
27	19 Ceti φ²	+ 3·0213	− 0·0014	− 0·018	− 19·686	+ 0·092	− 0·23	89
28	ρ Phœnicis	+ 2·7417	− 0·0246	...	− 19·666	+ 0·086	..	...
29	Radcliffe 247 ...	+ 3·3821	+ 0·0434	...	− 19·613	+ 0·110	...	...
30	37 Andromedæ μ ...	+ 3·2970	+ 0·0305	+ 0·014	− 19·580	+ 0·112	− 0·05	101
31	38 Andromedæ η ...	+ 3·1953	+ 0·0178	− 0·003	− 19·566	+ 0·110	+ 0·04	104
32	α Sculptoris	+ 2·8961	− 0·0101	...	− 19·526	+ 0·104	...	...
33	71 Piscium ε... ...	+ 3·1138	+ 0·0087	− 0·007	− 19·446	+ 0·119	− 0·04	113
34	ω Phœnicis	+ 2·5530	− 0·0252	...	− 19·440	+ 0·099	...	...
35	30 Cassiopeiæ μ ...	+ 3·5554	+ 0·0577	+ 0·386	− 19·367	+ 0·142	+ 1·58	118

Mean Positions of Stars for 1878, *January* 1*st*.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
36	41 Andromedæ	5·3	...	1	1	0·99	46	42	29·6	3	0·94
37	42 Andromedæ ϕ... ...	4·3	...	1	2	25·43	43	24	32·9	1	0·94
38	ζ Phœnicis 2nd	5·1	3	1	3	15·26	145	53	56·0	3	0·89
39	84 Piscium χ	4·9	...	1	4	53·88	69	36	52·2	4	0·93
40	Taylor 396	5·8	1	1	7	8·07	128	30	10·9	1	0·95
41	37 Ceti	5·0	...	1	8	15·11	98	34	43·6	2	0·96
42	ν Phœnicis	5·0	1	1	9	40·62	136	11	2·8	1	0·90
43	Lacaille 361	6·2	1	1	12	49·45	157	2	32·3	1	0·95
44	1 Urs. Min. α (*Polaris*) ...	2·2	...	1	14	2·08	1	20	28·0	6	0·59
45	46 Andromedæ ξ ...	4·9	...	1	15	9·46	45	6	39·7	5	0·93
46	36 Cassiopeiæ ψ	4·8	...	1	17	19·71	22	30	25·9	2	0·96
47	45 Ceti θ^1...	3·8	...	1	17	55·50	98	48	47·0	8	0·91
48	c^2 Phœnicis	...	...	1	19	16·77	132	7	39·6	1	0·93
49	46 Ceti	5·3	...	1	19	37·23	105	14	1·5	1	0·90
50	94 Piscium	5·6	...	1	20	6·40	71	23	33·4	1	0·95
51	48 Andromedæ ω	4·8	...	1	20	21·50	45	13	24·2	1	0·95
52	49 Andromedæ A ...	5·2	...	1	22	47·38	43	37	22·5	1	0·95
53	99 Piscium η	3·7	...	1	24	57·31	75	17	1·4	8	0·59
54	Taylor 502	5·8	4	1	27	28·74	127	29	31·1	4	0·93
55	Taylor 504	5·6	1	1	27	36·37	140	21	8·5	1	0·93
56	49 Ceti	5·5	...	1	28	40·11	106	18	7·2	2	0·95
57	50 Andromedæ υ ...	4·2	...	1	29	38·32	49	12	19·9	2	0·96
58	51 Andromedæ	3·7	...	1	30	30·44	41	59	24·2	2	0·95
59	Taylor 543	5·5	2	1	33	2·29	127	8	43·0	2	0·90
60	53 Andromedæ τ	4·9	...	1	33	22·78	50	2	29·4	3	0·94
61	Lacaille 499	7·0	1	1	34	48·90	156	13	36·5	1	1·00
62	106 Piscium ν	4·7	...	1	35	4·87	85	7	48·1	9	0·42
63	p Eridani 1st	5·7	1	1	35	9·66	146	48	56·9	1	0·95
64	54 Andromedæ	4·2	...	1	36	1·00	39	55	37·9	1	0·95
65	ψ Phœnicis	6·0	1	1	36	5·83	128	45	8·0	1	0·96
66	q^1 Eridani...	5·8	1	1	37	47·18	144	21	8·6	1	0·94
67	ϵ Sculptoris	5·4	5	1	39	55·85	115	39	45·9	5	0·93
68	Taylor 587	5·6	2	1	41	18·89	141	25	36·7	2	0·97
69	53 Ceti χ	4·8	...	1	43	35·52	101	17	30·3	1	0·90
70	2 Trianguli α	3·6	...	1	46	7·70	61	0	59·9	3	0·95

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	"	"	"	
36	41 Andromedæ ...	+ 3·4036	+ 0·0380	+ 0·014	− 19·348	+ 0·138	+ 0·07	129
37	42 Andromedæ ϕ ...	+ 3·4525	+ 0·0429	− 0·003	− 19·316	+ 0·143	+ 0·01	134
38	ζ Phœnicis—2nd ...	+ 2·5337	− 0·0221	− 0·021	− 19·295	+ 0·109	+ 0·02	Stone
39	84 Piscium χ ...	+ 3·2111	+ 0·0169	∓ 0·001	− 19·256	+ 0·139	− 0·01	150
40	Taylor 396	+ 2·7651	− 0·0126	...	− 19·199	+ 0·124	...	...
41	37 Ceti	+ 3·0130	+ 0·0014	+ 0·006	− 19·172	+ 0·136	− 0·28	164
42	ν Phœnicis	+ 2·6551	− 0·0159	+ 0·070	− 19·134	+ 0·124	− 0·15	Stone
43	Lacaille 361	+ 2·0862	− 0·0179	+ 0·001	− 19·052	+ 0·103	− 0·01	Stone
44	1 Ursæ Minoris α ...	+ 21·2007	+ 15·4788	+ 0·108	− 19·016	− 0·990	+ 0·00	102
45	46 Andromedæ ξ ...	+ 3·5011	+ 0·0417	+ 0·002	− 18·986	+ 0·172	− 0·01	177
46	36 Cassiopeiæ ψ ...	+ 4·1404	+ 0·1206	+ 0·011	− 18·923	+ 0·207	∓ 0·01	178
47	45 Ceti θ^1	+ 3·0032	+ 0·0018	− 0·007	− 18·906	+ 0·154	+ 0·20	184
48	c^2 Phœnicis	+ 2·6622	− 0·0124	...	− 18·866	+ 0·139	...	...
49	46 Ceti	+ 2·9483	− 0·0008	+ 0·001	− 18·856	+ 0·154	− 0·01	190
50	94 Piscium	+ 3·2264	+ 0·0163	+ 0·001	− 18·842	+ 0·169	+ 0·04	189
51	48 Andromedæ ω ...	+ 3·5280	+ 0·0420	+ 0·031	− 18·834	+ 0·184	+ 0·10	186
52	49 Andromedæ A ...	+ 3·5680	+ 0·0447	− 0·001	− 18·760	+ 0·191	+ 0·04	196
53	99 Piscium η... ...	+ 3·1994	+ 0·0141	− 0·000	− 18·692	+ 0·177	+ 0·00	203
54	Taylor 502	+ 2·6902	− 0·0095	...	− 18·610	+ 0·154	...	...
55	Taylor 504	+ 2·4704	− 0·0136	...	− 18·607	+ 0·142	...	...
56	49 Ceti	+ 2·9248	− 0·0008	+ 0·004	− 18·572	+ 0·169	− 0·01	210
57	50 Andromedæ υ ...	+ 3·5121	+ 0·0369	− 0·017	− 18·540	+ 0·203	+ 0·37	209
58	51 Andromedæ ...	+ 3·6437	+ 0·0483	+ 0·005	− 18·511	+ 0·212	+ 0·11	212
59	Taylor 543	+ 2·6723	− 0·0086	...	− 18·424	+ 0·162	...	...
60	53 Andromedæ τ ...	+ 3·5162	+ 0·0360	+ 0·001	− 18·413	+ 0·211	+ 0·02	221
61	Lacaille 499	+ 1·8522	− 0·0057	...	− 18·362	+ 0·117	...	...
62	106 Piscium ν ...	+ 3·1182	+ 0·0091	− 0·003	− 18·353	+ 0·191	− 0·01	228
63	p Eridani—1st ...	+ 2·2477	− 0·0118	...	− 18·350	+ 0·140	...	...
64	54 Andromedæ ...	+ 3·7221	+ 0·0528	+ 0·001	− 18·320	+ 0·228	+ 0·03	227
65	ψ Phœnicis	+ 2·6353	− 0·0089	...	− 18·317	+ 0·165	...	...
66	q^1 Eridani	+ 2·3007	− 0·0118	...	− 18·256	+ 0·147	...	...
67	ϵ Sculptoris	+ 2·8010	− 0·0038	+ 0·009	− 18·178	+ 0·180	+ 0·08	Stone
68	Taylor 587	+ 2·3551	− 0·0108	...	− 18·126	+ 0·155	...	...
69	53 Ceti χ	+ 2·9557	+ 0·0021	− 0·013	− 18·040	+ 0·196	+ 0·09	242
70	2 Trianguli α ...	+ 3·4032	+ 0·0250	+ 0·000	− 17·942	+ 0·229	+ 0·23	245

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
71	5 Arietis γ^1 (*South*) ...	5·0	...	1	46	50·18	71	18	18·5	1	0·97
72	5 Arietis γ^2 (*North*) ...	5·1	...	1	46	50·31	71	18	9·9	1	0·97
73	6 Arietis β	2·8	...	1	47	54·09	69	47	21·7	9	0·42
74	Taylor 629	5·0	2	1	48	45·43	136	54	2·5	2	0·96
75	ϕ Phœnicis	5·0	1	1	49	18·21	133	5	46·5	1	0·96
76	η^1 Hydri	7·5	1	1	49	29·82	158	32	45·8	1	1·00
77	Taylor 646	5·5	2	1	52	19·80	137	58	54·1	2	0·91
78	59 Ceti υ	3·8	...	1	54	15·35	111	40	11·1	2	0·94
79	113 Piscium α—2nd ...	4·0	...	1	55	43·84	87	49	34·4	4	0·94
80	ν Fornacis	5·7	2	1	59	1·14	119	52	57·8	2	0·96
81	13 Arietis α	2·0	...	2	0	17·83	67	6	55·6	11	0·45
82	8 Trianguli δ	5·0	...	2	9	36·44	56	20	6·7	2	0·01
83	67 Ceti	5·5	...	2	10	53·88	96	59	5·0	8	0·93
84	π^1 Hydri	5·8	3	2	11	41·96	158	24	44·6	3	0·02
85	π^2 Hydri	5·7	4	2	12	56·59	158	18	45·3	4	0·04
86	9 Persei i	5·2	...	2	13	51·35	34	42	48·8	5	0·95
87	Taylor 798	5·7	3	2	17	24·79	133	45	31·0	3	0·03
88	Taylor 810	5·7	3	2	18	36·99	141	38	58·1	3	0·94
89	Radcliffe 706	4·5	3	2	19	2·04	23	8	50·7	3	0·02
90	72 Ceti ρ	4·9	...	2	20	3·25	102	50	29·7	2	0·94
91	73 Ceti ξ^3	4·4	...	2	21	40·37	82	5	14·7	3	0·97
92	κ Eridani	4·8	2	2	22	30·80	138	15	6·9	2	0·98
93	75 Ceti	5·6	...	2	25	56·95	91	34	30·0	2	0·95
94	76 Ceti σ	4·7	...	2	26	18·02	105	46	51·4	2	0·96
95	78 Ceti ν	4·9	...	2	29	28·40	84	56	23·9	4	0·92
96	81 Ceti	5·7	...	2	31	33·03	93	55	31·7	2	0·91
97	η Horologii	5·7	2	2	33	22·78	143	4	18·4	2	0·96
98	83 Ceti ϵ	5·0	...	2	33	39·77	102	23	27·3	1	0·94
99	Taylor 906	6·0	1	2	35	8·74	133	24	57·1	1	1·00
100	13 Persei θ	4·2	...	2	35	52·35	41	17	20·8	1	0·97
101	35 Arietis	4·7	...	2	36	17·74	62	48	46·7	2	0·94
102	86 Ceti γ—2nd	3·6	...	2	36	58·77	87	16	46·2	6	0·33
103	1 Eridani τ^1	4·7	...	2	39	24·63	109	5	24·1	2	0·95
104	39 Arietis	4·6	...	2	40	38·76	61	15	40·0	2	0·96
105	γ Fornacis	5·9	2	2	44	26·69	115	3	46·0	2	0·96

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
71	5 Arietis γ^1 ...	+ 3·2756	+ 0·0172	+ 0·004	− 17·914	+ 0·222	+ 0·10	248
72	5 Arietis γ^2 ...							249
73	6 Arietis β	+ 3·2955	+ 0·0183	+ 0·005	− 17·872	+ 0·226	+ 0·10	252
74	Taylor 629	+ 2·4194	− 0·0089	...	− 17·839	+ 0·169	...	...
75	ϕ Phœnicis	+ 2·4981	− 0·0083	− 0·015	− 17·816	+ 0·175	+ 0·04	Stone
76	η^1 Hydri	+ 1·5081	+ 0·0091	...	− 17·809	+ 0·109	...	...
77	Taylor 646	+ 2·3737	− 0·0084	...	− 17·693	+ 0·171	...	...
78	59 Ceti υ	+ 2·8183	− 0·0013	+ 0·007	− 17·613	+ 0·204	+ 0·02	273
79	113 Piscium α ...	+ 3·0969	+ 0·0084	+ 0·002	− 17·551	+ 0·226	+ 0·01	277
80	ν Fornacis	+ 2·6910	− 0·0036	...	− 17·409	+ 0·202	...	...
81	13 Arietis α	+ 3·3551	+ 0·0203	+ 0·013	− 17·354	+ 0·252	+ 0·13	287
82	8 Trianguli δ ...	+ 3·5494	+ 0·0296	+ 0·090	− 16·932	+ 0·284	+ 0·22	317
83	67 Ceti	+ 2·9837	+ 0·0049	+ 0·004	− 16·871	+ 0·242	+ 0·11	321
84	π^1 Hydri	+ 1·2357	+ 0·0211	...	− 16·833	+ 0·105	...	...
85	π^2 Hydri	+ 1·2297	+ 0·0213	...	− 16·774	+ 0·105	...	...
86	9 Persei i	+ 4·1365	+ 0·0730	− 0·002	− 16·730	+ 0·339	+ 0·01	326
87	Taylor 798	+ 2·3498	− 0·0043	...	− 16·556	+ 0·200	...	...
88	Taylor 810	+ 2·1114	− 0·0032	...	− 16·497	+ 0·182	...	...
89	Radcliffe 706... ...	+ 4·8551	+ 0·1310	...	− 16·476	+ 0·410	...	...
90	72 Ceti ρ	+ 2·8974	+ 0·0031	− 0·003	− 16·425	+ 0·249	− 0·00	343
91	73 Ceti ξ^2	+ 3·1800	+ 0·0117	+ 0·001	− 16·344	+ 0·276	+ 0·00	347
92	κ Eridani	+ 2·1996	− 0·0033	+ 0·000	− 16·300	+ 0·194	− 0·04	Stone
93	75 Ceti	+ 3·0504	+ 0·0074	− 0·002	− 16·123	+ 0·271	+ 0·03	354
94	76 Ceti σ	+ 2·8471	+ 0·0024	− 0·006	− 16·104	+ 0·256	+ 0·11	356
95	78 Ceti ν	+ 3·1440	+ 0·0103	− 0·005	− 15·938	+ 0·285	+ 0·03	362
96	81 Ceti	+ 3·0159	+ 0·0066	+ 0·002	− 15·827	+ 0·277	+ 0·03	368
97	η Horologii	+ 1·9686	− 0·0001	...	− 15·728	+ 0·185	+ 0·02	Stone
98	83 Ceti ϵ	+ 2·8897	+ 0·0038	+ 0·008	− 15·713	+ 0·269	+ 0·25	375
99	Taylor 906	+ 2·2798	− 0·0022	+ 0·006	− 15·631	+ 0·215	+ 0·03	Stone
100	13 Persei θ	+ 4·0297	+ 0·0508	+ 0·033	− 15·592	+ 0·376	+ 0·09	374
101	35 Arietis	+ 3·5052	+ 0·0233	− 0·002	− 15·569	+ 0·329	+ 0·01	380
102	86 Ceti γ—2nd ...	+ 3·1125	+ 0·0094	− 0·011	− 15·531	+ 0·294	+ 0·16	383
103	1 Eridani τ^1	+ 2·7757	+ 0·0016	+ 0·022	− 15·396	+ 0·267	− 0·05	390
104	39 Arietis	+ 3·5451	+ 0·0253	+ 0·010	− 15·326	+ 0·340	+ 0·11	389
105	γ Fornacis	+ 2·6611	+ 0·0008	...	− 15·109	+ 0·261	...	...

Mean Positions of Stars for 1878, *January* 1*st*.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
106	η^2 Fornacis	5·7	2	2	45	18·76	126	21	0·9	2	0·93
107	2 Eridani τ^2	4·8	...	2	45	30·10	111	30	27·8	2	0·96
108	η^3 Fornacis	5·7	1	2	45	44·67	126	10	43·9	1	0·93
109	Lacaille 943	5·8	1	2	49	6·97	158	1	25·9	1	0·95
110	4 Eridani	5·4	...	2	51	58·11	114	21	9·3	3	0·97
111	6 Eridani	6·1	...	2	52	40·15	114	5	50·6	2	0·94
112	92 Ceti *a* (*Menkar*) ...	2·7	...	2	55	54·12	86	23	22·3	8	0·39
113	23 Persei γ	3·1	...	2	55	57·86	36	58	21·1	1	0·96
114	10 Eridani ρ^3	5·4	...	2	58	17·01	98	4	44·5	2	0·94
115	27 Persei κ	4·0	...	3	1	16·05	45	36	23·8	2	0·98
116	28 Persei ω...	4·7	...	3	3	25·02	50	51	11·2	2	0·95
117	R. P. L. 33	5·8	...	3	3	43·13	5	31	34·0	6	0·33
118	57 Arietis δ	4·5	...	3	4	39·29	70	44	10·7	3	0·34
119	95 Ceti	5·7	...	3	12	7·98	91	22	32·8	2	0·95
120	96 Ceti κ^1	5·0	...	3	12	57·80	87	4	41·7	1	1·00
121	15 Eridani...	5·0	...	3	12	58·35	112	57	28·2	1	0·97
122	*e* Eridani	4·6	2	3	15	3·60	133	32	14·9	2	0·97
123	Radcliffe 956	4·3	2	3	19	11·89	30	29	12·6	2	0·95
124	Radcliffe 969	5·4	1	3	20	42·32	34	58	18·2	1	0·95
125	35 Persei σ	4·4	...	3	21	58·59	42	25	40·0	1	0·95
126	R. P. L. 34	5·9	...	3	26	42·06	3	44	29·2	4	0·17
127	37 Persei ψ	4·2	...	3	27	49·21	42	12	51·8	2	0·96
128	Lacaille 1164	5·7	2	3	29	37·33	156	54	12·7	2	0·96
129	10 Tauri	4·4	...	3	30	38·83	89	59	10·8	3	0·95
130	22 Eridani...	5·4	...	3	34	35·93	95	36	20·6	2	0·98
131	40 Persei *o*	5·0	...	3	36	40·15	58	6	0·0	1	0·99
132	25 Tauri η (*Alcyone*) ...	3·0	...	3	40	14·04	66	16	26·6	8	0·05
133	28 Tauri (*Pleione*) ...	5·6	1	3	41	55·66	66	14	13·7	1	0·97
134	44 Persei ζ	3·1	...	3	46	27·82	58	28	50·1	1	0·95
135	32 Eridani (S)	5·1	...	3	48	9·81	93	19	0·6	2	0·98
136	υ^3 Eridani	5·2	1	3	49	0·03	125	5	39·5	1	0·94
137	45 Persei ϵ	3·0	...	3	49	40·02	50	20	39·2	1	0·97
138	34 Eridani γ^1	3·1	...	3	52	20·21	103	51	24·8	8	0·06
139	36 Eridani τ^9	4·6	...	3	54	43·26	114	21	48·5	1	0·95
140	38 Tauri ν...	4·0	...	3	56	39·97	84	21	0·3	1	0·97

117.—Groombridge 595.

126.—Groombridge 642.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	″	″	″	
106	η^2 Fornacis	+ 2·4226	− 0·0009	...	− 15·060	+ 0·239	...	...
107	2 Eridani τ^2	+ 2·7240	+ 0·0016	− 0·006	− 15·049	+ 0·268	+ 0·02	404
108	η^3 Fornacis	+ 2·4252	− 0·0008	...	− 15·035	+ 0·240	...	...
109	Lacaille 943	+ 0·8434	+ 0·0342	...	− 14·837	+ 0·089	...	...
110	4 Eridani	+ 2·6596	+ 0·0014	+ 0·005	− 14·668	+ 0·270	+ 0·03	418
111	6 Eridani	+ 2·6631	+ 0·0015	+ 0·001	− 14·627	+ 0·272	+ 0·00	423
112	92 Ceti α	+ 3·1308	+ 0·0098	− 0·003	− 14·431	+ 0·323	+ 0·07	428
113	23 Persei γ	+ 4·3057	+ 0·0594	− 0·002	− 14·428	+ 0·442	+ 0·00	422
114	10 Eridani ρ^3 ...	+ 2·9391	+ 0·0057	+ 0·003	− 14·286	+ 0·306	− 0·01	435
115	27 Persei κ	+ 4·0029	+ 0·0410	+ 0·015	− 14·101	+ 0·421	+ 0·16	438
116	28 Persei ω	+ 3·8532	+ 0·0336	− 0·003	− 13·966	+ 0·409	− 0·02	443
117	R. P. L. 33	+ 13·0004	+ 1·6070	+ 0·045	− 13·948	+ 1·368	+ 0·12	402
118	57 Arietis δ	+ 3·4093	+ 0·0171	+ 0·010	− 13·889	+ 0·364	− 0·01	446
119	95 Ceti	+ 3·0483	+ 0·0079	+ 0·016	− 13·410	+ 0·336	− 0·07	461
120	96 Ceti κ^1	+ 3·1232	+ 0·0094	+ 0·016	− 13·357	+ 0·345	− 0·11	463
121	15 Eridani	+ 2·6498	+ 0·0024	− 0·000	− 13·355	+ 0·294	− 0·01	466
122	ϵ Eridani	+ 2·1170	+ 0·0017	+ 0·266	− 13·219	+ 0·238	− 0·75	Stone
123	Radcliffe 956 ...	+ 4·8067	+ 0·0773	...	− 12·945	+ 0·541	...	...
124	Radcliffe 969 ...	+ 4·5403	+ 0·0610	...	− 12·846	+ 0·515	...	...
125	35 Persei σ	+ 4·2008	+ 0·0436	0·000	− 12·753	+ 0·477	− 0·02	479
126	R. P. L. 34	+ 19·1122	+ 3·2427	+ 0·136	− 12·436	+ 2·192	+ 0·06	Gr.
127	37 Persei ψ	+ 4·2328	+ 0·0436	+ 0·002	− 12·359	+ 0·491	+ 0·04	488
128	Lacaille 1164 ...	+ 0·5884	+ 0·0357	...	− 12·235	+ 0·073	...	...
129	10 Tauri	+ 3·0724	+ 0·0082	− 0·016	− 12·163	+ 0·361	+ 0·50	497
130	22 Eridani	+ 2·9666	+ 0·0065	− 0·003	− 11·886	+ 0·353	− 0·01	505
131	40 Persei o	+ 3·7469	+ 0·0235	− 0·000	− 11·740	+ 0·448	+ 0·00	501
132	25 Tauri η	+ 3·5539	+ 0·0177	− 0·000	− 11·486	+ 0·430	+ 0·04	521
133	28 Tauri	+ 3·5572	+ 0·0175	− 0·001	− 11·364	+ 0·432	+ 0·06	528
134	44 Persei ζ	+ 3·7569	+ 0·0221	− 0·000	− 11·035	+ 0·462	+ 0·00	534
135	32 Eridani	+ 3·0072	+ 0·0070	+ 0·002	− 10·911	+ 0·373	+ 0·00	540
136	υ^3 Eridani	+ 2·2822	+ 0·0026	− 0·003	− 10·848	+ 0·285	+ 0·05	Stone
137	45 Persei ϵ	+ 4·0061	+ 0·0289	+ 0·000	− 10·800	+ 0·497	+ 0·02	539
138	34 Eridani γ^1 ...	+ 2·7923	+ 0·0047	+ 0·003	− 10·602	+ 0·351	+ 0·11	546
139	36 Eridani τ^9 ...	+ 2·5551	+ 0·0033	− 0·000	− 10·424	+ 0·322	− 0·02	551
140	38 Tauri ν	+ 3·1859	+ 0·0093	+ 0·000	− 10·279	+ 0·403	+ 0·01	553

126.—Proper motions from *Greenwich Catalogue* of 1872.

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
141	R. P. L. 35	6·7	...	3	58	49·26	4	46	10·9	2	0·76
142	38 Eridani o^1	4·1	...	4	5	54·60	97	9	22·7	1	0·07
143	51 Persei μ	4·2	...	4	5	56·45	41	54	9·7	2	0·98
144	δ Horologii	5·0	5	4	6	44·31	132	18	46·4	5	0·06
145	ψ Horologii—1st	5·2	1	4	15	24·71	134	33	40·3	1	0·99
146	θ Reticuli	5·4	5	4	16	18·93	153	33	8·2	5	0·07
147	74 Tauri ϵ...	3·7	...	4	21	29·56	71	5	31·4	7	0·08
148	78 Tauri θ^2	3·6	...	4	21	41·42	74	24	11·1	1	0·99
149	δ Cœli	5·3	5	4	27	6·18	135	13	0·0	5	0·06
150	87 Tauri α (*Aldebaran*) ...	1·0	...	4	28	55·28	73	44	15·8	3	0·09
151	β Cœli	5·2	5	4	37	44·65	127	23	2·2	5	0·07
152	λ Pictoris	5·1	5	4	39	38·96	140	42	41·4	5	0·08
153	κ Doradûs	5·5	1	4	42	30·96	149	57	26·8	1	0·06
154	3 Aurigæ ι	2·7	...	4	49	2·98	57	1	43·5	6	0·09
155	γ^1 Cœli	5·1	5	5	0	1·21	125	39	3·6	5	0·07
156	γ^2 Cœli	5·6	5	5	0	4·92	125	52	33·5	5	0·07
157	2 Leporis ϵ	3·3	...	5	0	17·75	112	32	9·6	5	0·10
158	β Mensæ	5·7	5	5	4	18·39	161	28	54·1	5	0·08
159	19 Orionis β (*Rigel*) ...	0·3	...	5	8	40·47	98	20	37·7	3	0·12
160	o Columbæ	5·0	5	5	13	5·15	125	0	56·4	5	0·08
161	θ Doradûs	5·0	5	5	13	51·52	157	19	23·2	5	0·08
162	ζ Pictoris	5·3	5	5	16	22·59	140	44	15·4	5	0·09
163	112 Tauri β	1·9	...	5	18	34·81	61	29	51·6	4	0·07
164	κ Pictoris	5·1	5	5	20	7·47	146	14	57·3	5	0·09
165	θ Pictoris—2nd	5·6	5	5	22	0·29	142	25	23·3	5	0·11
166	R. P. L. 40	6·0	...	5	23	4·22	4	52	14·4	6	0·18
167	34 Orionis δ, Var. 1 ...	Var.	...	5	25	46·45	90	23	25·0	2	0·12
168	11 Leporis α	2·7	...	5	27	20·96	107	54	38·5	1	0·12
169	37 Orionis ϕ^1	4·4	...	5	28	7·38	80	35	39·9	5	0·08
170	39 Orionis λ—1st ...	3·7	...	5	28	25·05	80	8	56·8	5	0·09
171	46 Orionis ϵ	1·8	...	5	30	1·32	91	16	52·2	3	0·13
172	40 Orionis ϕ^2	4·4	...	5	30	12·12	80	46	36·7	5	0·10
173	α Columbæ	2·7	...	5	35	13·88	124	8	23·7	2	0·11
174	14 Leporis ζ	3·7	...	5	41	25·57	104	52	6·6	5	0·07
175	μ Columbæ	5·5	5	5	41	27·78	122	21	15·0	5	0·08

141.—Groombridge 750.

166.—Groombridge 944.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
141	R. P. L. 35	+ 16·9065	+ 1·8087	+ 0·057	− 10·117	+ 2·132	− 0·05	Gr.
142	38 Eridani o^1 ...	+ 2·9248	+ 0·0058	− 0·001	− 9·576	+ 0·379	− 0·09	568
143	51 Persei μ	+ 4·3814	+ 0·0362	− 0·001	− 9·573	+ 0·565	+ 0·03	564
144	δ Horologii	+ 2·0008	+ 0·0039	+ 0·013	− 9·513	+ 0·261	0·00	Stone
145	ψ Horologii—1st ...	+ 1·8903	+ 0·0045	− 0·002	− 8·837	+ 0·251	− 0·03	Stone
146	θ Reticuli	+ 0·6550	+ 0·0231	− 0·009	− 8·766	+ 0·090	+ 0·05	Stone
147	74 Tauri ϵ	+ 3·4886	+ 0·0120	+ 0·007	− 8·357	+ 0·466	+ 0·03	609
148	78 Tauri 0^2	+ 3·4116	+ 0·0110	+ 0·006	− 8·341	+ 0·456	+ 0·00	613
149	δ Cœli	+ 1·8343	+ 0·0048	− 0·006	− 7·909	+ 0·249	+ 0·04	Stone
150	87 Tauri α	+ 3·4318	+ 0·0105	+ 0·004	− 7·762	+ 0·464	+ 0·18	630
151	β Cœli	+ 2·1158	+ 0·0036	− 0·006	− 7·044	+ 0·292	− 0·20	Stone
152	λ Pictoris	+ 1·5376	+ 0·0068	+ 0·001	− 6·888	+ 0·214	− 0·02	Stone
153	κ Doradûs	+ 0·8915	+ 0·0141	...	− 6·505	+ 0·125	... ...	...
154	3 Aurigæ ι	+ 3·8982	+ 0·0144	+ 0·001	− 6·110	+ 0·544	+ 0·00	677
155	γ^1 Cœli	+ 2·1460	+ 0·0033	+ 0·007	− 5·189	+ 0·304	+ 0·09	Stone
156	γ^2 Cœli	+ 2·1382	+ 0·0034	− 0·000	− 5·184	+ 0·303	− 0·10	Stone
157	2 Leporis ϵ	+ 2·5362	+ 0·0033	+ 0·000	− 5·165	+ 0·359	+ 0·07	713
158	β Mensæ	− 0·8024	+ 0·0393	...	− 4·825	− 0·112	...	...
159	19 Orionis β... ...	+ 2·8810	+ 0·0040	− 0·001	− 4·454	+ 0·412	− 0·01	736
160	o Columbæ	+ 2·1557	+ 0·0032	+ 0·010	− 4·077	+ 0·310	+ 0·31	Stone
161	θ Doradûs	− 0·0628	+ 0·0206	...	− 4·010	− 0·007	− 0·04	Stone
162	ζ Pictoris	+ 1·4662	+ 0·0053	+ 0·003	− 3·795	+ 0·212	− 0·14	Stone
163	112 Tauri β	+ 3·7864	+ 0·0082	+ 0·001	− 3·605	+ 0·545	+ 0·18	756
164	κ Pictoris	+ 1·1016	+ 0·0071	− 0·004	− 3·472	+ 0·159	− 0·09	Stone
165	θ Pictoris—2nd ...	+ 1·3585	+ 0·0055	...	− 3·309	+ 0·196	+ 0·04	Stone
166	R. P. L. 40	+ 18·5579	+ 0·6238	...	− 3·234	+ 2·672	...	...
167	34 Orionis δ	+ 3·0632	+ 0·0038	− 0·001	− 2·984	+ 0·443	+ 0·01	787
168	11 Leporis α... ...	+ 2·6445	+ 0·0029	− 0·001	− 2·848	+ 0·383	− 0·01	796
169	37 Orionis ϕ^1 ...	+ 3·2915	+ 0·0043	− 0·002	− 2·781	+ 0·476	+ 0·00	792
170	39 Orionis λ	+ 3·3022	+ 0·0044	− 0·002	− 2·755	+ 0·478	+ 0·02	794
171	46 Orionis ϵ	+ 3·0426	+ 0·0035	− 0·002	− 2·616	+ 0·441	− 0·01	809
172	40 Orionis ϕ^2 ...	+ 3·2875	+ 0·0042	+ 0·004	− 2·600	+ 0·476	+ 0·31	805
173	α Columbæ	+ 2·1710	+ 0·0027	+ 0·005	− 2·164	+ 0·316	+ 0·03	Stone
174	14 Leporis ζ... ...	+ 2·7185	+ 0·0026	− 0·002	− 1·624	+ 0·396	− 0·01	843
175	μ Columbæ	+ 2·2281	+ 0·0027	− 0·005	− 1·620	+ 0·325	+ 0·04	Stone

141.—Proper motions from *Greenwich Catalogue* of 1872.

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
176	β Pictoris	4·5	5	5	44	23·89	141	6	41·2	5	0·09
177	8 Doradûs	4·5	5	5	44	33·39	155	46	54·2	5	0·11
178	15 Leporis δ	4·0	...	5	46	4·45	110	53	25·4	5	0·10
179	γ Pictoris	4·6	4	5	47	36·76	146	11	51·7	5	0·13
180	58 Orionis α (*Betelgeux*) ...	Var.	...	5	48	34·04	82	37	1·0	8	0·14
181	λ Columbæ	5·0	5	5	48	41·03	123	49	44·8	5	0·12
182	ε Doradûs	5·1	5	5	50	1·47	156	55	54·3	5	0·09
183	61 Orionis μ	4·3	...	5	55	40·36	80	21	14·6	5	0·08
184	R. P. L. 43	6·6	...	5	58	15·57	3	14	14·8	5	0·22
185	67 Orionis ν	4·4	...	6	0	36·43	75	13	5·8	8	0·16
186	18 Leporis θ	4·6	...	6	0	38·06	104	55	31·8	5	0·10
187	π^1 Columbæ	5·7	5	6	2	54·78	132	17	2·8	5	0·09
188	θ Columbæ	5·1	5	6	3	20·60	127	14	9·2	5	0·11
189	π^2 Columbæ	5·6	5	6	4	5·62	132	8	8·3	5	0·12
190	70 Orionis ξ	4·2	...	6	5	0·17	75	45	55·8	5	0·08
191	44 Aurigæ κ	4·5	...	6	7	36·27	60	27	30·7	5	0·14
192	5 Monocerotis	4·0	...	6	8	54·40	96	14	19·6	5	0·13
193	ν Doradûs	5·6	4	6	9	31·18	158	49	1·1	4	0·13
194	η^2 Doradûs	5·5	5	6	10	59·61	155	33	39·8	5	0·08
195	κ Columbæ	4·5	5	6	12	12·64	125	6	3·9	5	0·08
196	13 Geminorum μ	3·2	...	6	15	34·81	67	25	32·7	12	0·11
197	λ Canis Majoris	4·1	...	6	23	38·89	122	30	15·4	6	0·13
198	π^1 Doradûs	5·6	5	6	23	47·50	159	55	0·0	5	0·12
199	π^2 Doradûs	5·6	5	6	26	31·01	159	37	15·3	5	0·14
200	4 Canis Majoris ξ^1 ...	4·2	...	6	26	46·35	113	19	54·8	5	0·14
201	5 Canis Majoris ξ^2 ...	4·4	...	6	29	56·66	112	52	9·1	5	0·14
202	μ Pictoris	5·5	5	6	30	9·10	148	39	43·4	5	0·15
203	24 Geminorum γ	2·0	...	6	30	39·82	73	29	54·6	11	0·11
204	7 Canis Majoris ν^2 ...	4·2	...	6	31	21·62	109	9	10·4	4	0·16
205	8 Canis Majoris ν^3 ...	4·7	...	6	32	31·39	108	7	57·7	4	0·14
206	Taylor 2633	5·0	5	6	35	22·59	138	6	41·8	5	0·13
207	Lalande 12863	7·6	2	6	35	26·27	83	32	25·9	2	0·06
208	18 Monocerotis	4·8	...	6	41	30·07	87	27	20·1	5	0·11
209	51 Cephei (*Hev.*)	5·0	...	6	42	46·13	2	46	5·4	2	0·19
210	*x* Puppis	5·1	5	6	43	10·88	127	47	45·9	5	0·13

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
176	β Pictoris	+ 1·4186	+ 0·0036	...	− 1·364	+ 0·207	− 0·06	Stone
177	δ Doradûs	+ 0·1066	+ 0·0082	− 0·002	− 1·351	+ 0·016	+ 0·02	Stone
178	15 Leporis δ	+ 2·5630	+ 0·0024	+ 0·016	− 1·218	+ 0·374	+ 0·65	858
179	γ Pictoris	+ 1·0782	+ 0·0043	...	− 1·083	+ 0·157	...	...
180	58 Orionis α	+ 3·2453	+ 0·0027	+ 0·001	− 1·000	+ 0·473	− 0·02	860
181	λ Columbæ	+ 2·1774	+ 0·0025	0·000	− 0·990	+ 0·317	− 0·09	Stone
182	ε Doradûs	− 0·0639	+ 0·0070	− 0·003	− 0·872	− 0·009	− 0·09	Stone
183	61 Orionis μ	+ 3·2995	+ 0·0022	+ 0·000	− 0·379	+ 0·481	− 0·02	877
184	R. P. L. 43	+ 26·7064	+ 0·0575	...	− 0·152	+ 3·894	...	...
185	67 Orionis ν	+ 3·4250	+ 0·0017	− 0·000	+ 0·053	+ 0·500	+ 0·01	887
186	18 Leporis θ	+ 2·7159	+ 0·0021	− 0·002	+ 0·055	+ 0·396	− 0·01	892
187	π^1 Columbæ	+ 1·8566	+ 0·0023	...	+ 0·254	+ 0·271	...	...
188	θ Columbæ	+ 2·0563	+ 0·0022	− 0·007	+ 0·293	+ 0·300	− 0·01	Stone
189	π^2 Columbæ ...	+ 1·8630	+ 0·0023	...	+ 0·358	+ 0·272	...	...
190	70 Orionis ξ	+ 3·4113	+ 0·0013	− 0·001	+ 0·438	+ 0·496	+ 0·02	903
191	44 Aurigæ κ	+ 3·8296	+ 0·0003	− 0·005	+ 0·666	+ 0·558	+ 0·26	907
192	5 Monocerotis ...	+ 2·9262	+ 0·0016	− 0·001	+ 0·779	+ 0·426	+ 0·06	920
193	ν Doradûs	− 0·3746	− 0·0011	...	+ 0·832	− 0·054	...	...
194	η^2 Doradûs	+ 0·1338	− 0·0003	...	+ 0·963	+ 0·019	...	...
195	κ Columbæ	+ 2·1342	+ 0·0021	...	+ 1·068	+ 0·311	...	...
196	13 Geminorum μ ...	+ 3·6268	− 0·0003	+ 0·004	+ 1·362	+ 0·527	+ 0·10	929
197	λ Canis Majoris ...	+ 2·2250	+ 0·0018	− 0·007	+ 2·066	+ 0·322	0·00	Stone
198	π^1 Doradûs	− 0·5647	− 0·0095	...	+ 2·083	− 0·079	− 0·08	Stone
199	π^2 Doradûs	− 0·5025	− 0·0104	...	+ 2·315	− 0·074	− 0·09	Stone
200	4 Canis Majoris ξ^1 ...	+ 2·4995	+ 0·0015	− 0·006	+ 2·338	+ 0·361	− 0·01	962
201	5 Canis Majoris ξ^2 ...	+ 2·5131	+ 0·0014	+ 0·002	+ 2·613	+ 0·362	− 0·03	972
202	μ Pictoris	+ 0·8957	− 0·0015	...	+ 2·632	+ 0·129	...	...
203	24 Geminorum γ ...	+ 3·4648	− 0·0015	+ 0·002	+ 2·675	+ 0·500	+ 0·04	969
204	7 Canis Majoris ν^2 ...	+ 2·6122	+ 0·0013	+ 0·003	+ 2·735	+ 0·376	+ 0·04	978
205	8 Canis Majoris ν^3	+ 2·6388	+ 0·0013	− 0·001	+ 2·837	+ 0·380	− 0·02	879
206	Taylor 2633	+ 1·5992	+ 0·0008	...	+ 3·083	+ 0·230	...	...
207	Lalande 12863 ...	+ 3·2226	− 0·0007	...	+ 3·088	+ 0·463	...	...
208	18 Monocerotis ...	+ 3·1307	− 0·0006	− 0·002	+ 3·615	+ 0·447	+ 0·01	995
209	51 Cephei (*Her.*) ...	+ 30·2428	− 2·1382	− 0·040	+ 3·721	+ 4·331	+ 0·05	Gr.
210	ϖ Puppis ...	+ 2·0537	+ 0·0014	− 0·001	+ 3·755	+ 0·292	+ 0·06	114

209.—Proper motions from *Greenwich Catalogue* of 1880.

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
211	34 Geminorum θ	3·7	...	6	44	44·81	55	53	36·3	5	0·14
212	Taylor 2727	5·0	4	6	46	25·97	124	13	26·7	4	0·12
213	Taylor 2731	5·4	6	6	46	28·09	136	29	6·7	6	0·15
214	Taylor 2742	5·2	5	6	47	12·06	143	28	48·0	5	0·16
215	*u* Puppis	5·6	5	6	47	24·30	126	4	56·3	5	0·15
216	14 Canis Majoris θ ...	4·2	...	6	48	31·49	101	53	11·8	5	0·14
217	18 Canis Majoris μ ...	5·2	...	6	50	31·21	103	53	11·6	5	0·14
218	20 Canis Majoris ι ...	4·5	...	6	50	41·72	106	53	48·9	5	0·16
219	ι Volantis	5·8	5	6	52	50·48	160	48	41·2	5	0·16
220	21 Canis Majoris ϵ ...	1·5	...	6	53	49·88	118	48	25·6	4	0·11
221	*t* Puppis	5·0	5	6	53	57·11	123	56	49·9	5	0·13
222	23 Canis Majoris γ ...	4·1	...	6	58	14·36	105	27	14·3	11	0·13
223	Taylor 2843	4·6	5	7	0	10·71	132	9	26·9	5	0·14
224	Taylor 2866	5·6	5	7	3	7·45	130	42	10·6	5	0·13
225	46 Geminorum τ	4·6	...	7	3	22·43	59	33	23·4	5	0·14
226	Taylor 2885	5·1	5	7	4	45·10	129	27	37·7	5	0·14
227	Radcliffe 1887	4·5	...	7	5	18·19	7	21	34·4	5	0·17
228	22 Monocerotis	4·0	...	7	5	38·07	90	17	29·7	5	0·17
229	Taylor 2920	5·1	5	7	8	13·27	130	17	36·1	5	0·15
230	Taylor 2934	5·0	5	7	9	4·97	136	33	22·6	5	0·16
231	27 Canis Majoris	4·5	...	7	9	16·82	116	8	34·7	5	0·16
232	Taylor 2938	5·0	5	7	9	34·28	134	58	17·1	5	0·15
233	γ Volantis—2nd	5·0	5	7	9	46·56	160	18	3·2	5	0·18
234	30 Canis Majoris	4·3	...	7	13	38·91	114	43	56·6	5	0·14
235	Taylor 2982	5·1	5	7	14	23·94	128	59	16·7	5	0·14
236	δ Volantis	5·0	6	7	16	53·00	157	44	2·3	6	0·14
237	62 Geminorum ρ	4·2	...	7	21	15·70	57	58	27·9	5	0·13
238	Taylor 3075	5·0	5	7	24	22·42	121	12	19·8	5	0·15
239	κ^3 Puppis	5·1	5	7	25	58·07	120	42	24·0	5	0·15
240	66 Geminorum α^2 (*Castor*).	2·8	...	7	26	48·89	57	50	44·8	16	0·20
241	n^1 Puppis	4·9	5	7	29	9·34	113	12	31·8	5	0·17
242	n^2 Puppis	5·8	5	7	29	9·94	113	12	34·5	5	0·17
243	*g* Puppis	5·3	5	7	29	27·12	115	51	1·6	5	0·17
244	10 Can. Min. α (*Procyon*)...	0·5	...	7	32	54·92	84	27	46·7	3	0·14
245	κ^1 Puppis	4·8	5	7	33	49·31	116	31	31·0	5	0·17

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	″	″	″	
211	34 Geminorum θ ...	+ 3·9604	− 0·0071	− 0·000	+ 3·891	+ 0·565	+ 0·03	1003
212	Taylor 2727	+ 2·1814	+ 0·0015	− 0·001	+ 4·035	+ 0·310	− 0·04	Stone
213	Taylor 2731	+ 1·6930	+ 0·0006	...	+ 4·038	+ 0·240	...	...
214	Taylor 2742	+ 1·3050	− 0·0011	...	+ 4·102	+ 0·184	...	...
215	*u* Puppis	+ 2·1187	+ 0·0014	...	+ 4·119	+ 0·301	...	...
216	14 Canis Majoris θ ...	+ 2·7971	+ 0·0004	− 0·011	+ 4·215	+ 0·397	+ 0·00	1011
217	18 Canis Majoris μ ...	+ 2·7497	+ 0·0005	− 0·002	+ 4·385	+ 0·389	− 0·01	1017
218	20 Canis Majoris ι ...	+ 2·6760	+ 0·0008	− 0·002	+ 4·400	+ 0·379	− 0·02	1019
219	ι Volantis	− 0·6678	− 0·0276	...	+ 4·583	− 0·097	...	...
220	21 Canis Majoris ε ...	+ 2·3572	+ 0·0013	− 0·001	+ 4·667	+ 0·332	− 0·02	1023
221	*t* Puppis	+ 2·1971	+ 0·0013	− 0·004	+ 4·677	+ 0·310	− 0·07	Stone
222	23 Canis Majoris γ ...	+ 2·7145	+ 0·0005	− 0·002	+ 5·041	+ 0·381	+ 0·00	1028
223	Taylor 2843	+ 1·9033	+ 0·0008	...	+ 5·206	+ 0·266	...	...
224	Taylor 2866	+ 1·9655	+ 0·0010	...	+ 5·454	+ 0·274	...	...
225	46 Geminorum τ ...	+ 3·8280	− 0·0090	− 0·003	+ 5·475	+ 0·535	+ 0·05	1033
226	Taylor 2885	+ 2·0153	+ 0·0011	− 0·008	+ 5·590	+ 0·280	+ 0·05	Stone
227	Radcliffe 1887 ...	+ 13·0065	− 0·4912	+ 0·009	+ 5·637	+ 1·818	+ 0·02	Main
228	22 Monocerotis ...	+ 3·0658	− 0·0016	− 0·001	+ 5·665	+ 0·427	− 0·03	1047
229	Taylor 2920	+ 1·9885	+ 0·0009	− 0·010	+ 5·882	+ 0·274	+ 0·05	Stone
230	Taylor 2934	+ 1·7243	− 0·0001	...	+ 5·954	+ 0·237	...	...
231	27 Canis Majoris ...	+ 2·4458	+ 0·0011	− 0·002	+ 5·970	+ 0·338	− 0·05	1059
232	Taylor 2938	+ 1·7977	+ 0·0003	...	+ 5·994	+ 0·247	...	...
233	γ Volantis—2nd ...	− 0·4901	− 0·0333	...	+ 6·012	− 0·071	...	...
234	30 Canis Majoris ...	+ 2·4879	+ 0·0010	− 0·002	+ 6·334	+ 0·341	− 0·03	1069
235	Taylor 2982	+ 2·0466	+ 0·0009	− 0·018	+ 6·396	+ 0·280	0·00	Stone
236	δ Volantis	− 0·0111	− 0·0251	− 0·004	+ 6·602	− 0·004	0·00	Stone
237	62 Geminorum ρ ...	+ 3·8564	− 0·0124	+ 0·009	+ 6·963	+ 0·525	− 0·19	1078
238	Taylor 3075	+ 2·3166	+ 0·0011	...	+ 7·217	+ 0·312	...	...
239	κ^3 Puppis	+ 2·3334	+ 0·0011	...	+ 7·348	+ 0·314	− 0·04	Stone
240	66 Geminorum α^2 ...	+ 3·8531	− 0·0133	− 0·015	+ 7·416	+ 0·519	+ 0·08	1087
241	n^1 Puppis	+ 2·5418	+ 0·0007	...	+ 7·606	+ 0·340	...	...
242	n^2 Puppis	+ 2·5418	+ 0·0007	...	+ 7·607	+ 0·340	...	...
243	*g* Puppis	+ 2·4732	+ 0·0010	...	+ 7·630	+ 0·331	...	...
244	10 Canis Minoris α ...	+ 3·1914	− 0·0041	− 0·047	+ 7·910	+ 0·425	+ 1·03	1106
245	κ^1 Puppis	+ 2·4601	+ 0·0010	...	+ 7·982	+ 0·326	...	...

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
246	κ^2 Puppis	5·3	5	7	33	49·96	116	31	38·4	5	0·18
247	26 Monocerotis γ	4·2	...	7	35	25·12	99	16	3·9	5	0·18
248	78 Geminorum β (*Pollux*)..	1·1	...	7	37	50·94	61	40	51·4	2	0·17
249	3 Puppis	5·1	5	7	38	54·65	118	39	51·2	5	0·17
250	Taylor 3214	4·7	5	7	39	32·64	130	38	11·6	5	0·16
251	*c* Puppis	5·0	5	7	40	54·44	127	40	23·3	5	0·16
252	*o* Puppis	5·1	5	7	43	0·82	115	38	6·6	5	0·18
253	ζ Volantis	6·6	3	7	43	18·56	162	18	50·0	3	0·24
254	Taylor 3279	4·5	3	7	45	31·28	136	3	58·9	3	0·15
255	9 Puppis	5·1	4	7	46	7·29	103	34	31·3	4	0·19
256	R.P.L. 49	6·7	...	7	47	29·12	5	35	39·4	3	0·50
257	Taylor 3297	5·1	5	7	47	42·34	124	23	57·7	5	0·18
258	*a* Puppis	5·0	4	7	48	1·40	130	15	44·0	4	0·24
259	*b* Puppis	5·0	4	7	48	19·47	128	32	52·5	4	0·19
260	Taylor 3317	5·0	5	7	49	37·25	139	17	47·0	5	0·17
261	B. F. 1129	5·2	5	7	54	23·88	108	3	55·4	5	0·16
262	Taylor 3362	5·0	5	7	54	43·82	138	54	50·4	5	0·18
263	6 Cancri	5·0	...	7	56	1·37	61	51	54·9	10	0·17
264	15 Argûs ι	2·9	...	8	2	20·89	113	57	12·0	4	0·17
265	29 Monocerotis	4·5	...	8	2	27·73	92	37	46·2	5	0·24
266	16 Puppis	5·0	5	8	3	34·79	108	53	17·2	5	0·15
367	γ Argûs—1st	5·0	5	8	5	43·80	136	59	11·9	5	0·17
268	Taylor 3478	5·8	2	8	6	43·03	145	43	34·9	2	0·23
269	Taylor 3484	5·5	3	8	6	59·17	150	55	56·7	3	0·23
270	h^1 Puppis	5·6	2	8	7	0·07	129	15	20·4	2	0·23
271	Taylor 3480	5·4	2	8	7	18·64	132	37	25·1	2	0·22
272	ϵ Volantis	5·1	3	8	7	31·71	158	15	33·0	3	0·22
273	20 Puppis	5·1	5	8	7	43·43	105	25	17·6	5	0·18
274	*r* Puppis	5·0	5	8	8	53·28	125	31	54·2	5	0·17
275	17 Cancri β	3·8	...	8	9	53·79	80	26	22·8	5	0·16
276	30 Lyncis	5·9	...	8	10	34·13	31	52	41·4	1	0·24
277	Lacaille 3275	5·8	2	8	13	25·08	152	32	23·8	2	0·23
278	*q* Puppis	5·0	5	8	13	59·44	126	16	55·3	5	0·15
279	31 Lyncis	4·4	...	8	14	28·81	46	25	19·6	1	0·25
280	Radcliffe 2130	5·0	1	8	14	33·84	36	23	19·4	1	0·25

256.—Groombridge 1359.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	″	″	″	
246	κ^2 Puppis	+ 2·4601	+ 0·0010	...	+ 7·984	+ 0·326	...	...
247	26 Monocerotis γ ...	+ 2·8728	− 0·0011	− 0·008	+ 8·110	+ 0·380	+ 0·02	1110
248	78 Geminorum β ...	+ 3·7280	− 0·0128	− 0·048	+ 8·305	+ 0·491	+ 0·05	1112
249	3 Puppis	+ 2·4084	+ 0·0011	− 0·002	+ 8·389	+ 0·315	+ 0·05	Stone
250	Taylor 3214	+ 2·0314	+ 0·0008	...	+ 8·439	+ 0·265	...	...
251	c Puppis	+ 2·1384	+ 0·0011	0·000	+ 8·547	+ 0·278	0·00	Stone
252	o Puppis	+ 2·4944	+ 0·0008	− 0·004	+ 8·715	+ 0·324	0·00	Stone
253	ζ Volantis	− 0·7016	− 0·0610	...	+ 8·737	− 0·096	...	...
254	Taylor 3279	+ 1·8291	− 0·0001	− 0·002	+ 8·911	+ 0·235	0·00	Stone
255	9 Puppis	+ 2·7834	− 0·0006	...	+ 8·958	+ 0·359	...	...
256	R. P. L. 49	+ 15·2467	− 1·2388	...	+ 9·064	+ 1·979	...	...
257	Taylor 3297	+ 2·2561	+ 0·0014	− 0·019	+ 9·082	+ 0·290	− 0·32	Stone
258	a Puppis	+ 2·0635	+ 0·0010	...	+ 9·106	+ 0·264	...	...
259	b Puppis	+ 2·1238	+ 0·0012	...	+ 9·130	+ 0·272	...	...
260	Taylor 3317	+ 1·6925	− 0·0012	...	+ 9·230	+ 0·215	− 0·02	Stone
261	B. F. 1129	+ 2·6894	+ 0·0002	...	+ 9·599	+ 0·340	...	...
262	Taylor 3362	+ 1·7271	− 0·0010	...	+ 9·626	+ 0·217	...	...
263	6 Cancri	+ 3·6975	− 0·0148	− 0·003	+ 9·724	+ 0·468	+ 0·04	1149
264	15 Argûs ι	+ 2·5609	+ 0·0009	− 0·008	+ 10·205	+ 0·318	− 0·06	1170
265	29 Monocerotis ...	+ 3·0194	− 0·0031	− 0·003	+ 10·211	+ 0·375	− 0·02	1168
266	16 Puppis	+ 2·6797	+ 0·0003	...	+ 10·297	+ 0·332	...	...
267	γ Argûs—1st ...	+ 1·8496	0·0000	...	+ 10·458	+ 0·226	...	...
268	Taylor 3478	+ 1·4028	− 0·0052	...	+ 10·532	+ 0·169	...	...
269	Taylor 3484	+ 1·0268	− 0·0129	...	+ 10·552	+ 0·122	...	...
270	h^1 Puppis	+ 2·1432	+ 0·0015	...	+ 10·553	+ 0·261	...	...
271	Taylor 3480	+ 2·0269	+ 0·0011	...	+ 10·575	+ 0·246	...	...
272	ϵ Volantis	+ 0·2255	− 0·0364	− 0·015	+ 10·592	+ 0·023	− 0·06	Stone
273	20 Puppis	+ 2·7593	− 0·0004	...	+ 10·606	+ 0·337	...	...
274	r Puppis	+ 2·2646	+ 0·0018	− 0·004	+ 10·693	+ 0·275	+ 0·02	Stone
275	17 Cancri β	+ 3·2622	− 0·0072	− 0·004	+ 10·768	+ 0·397	+ 0·04	1180
276	30 Lyncis	+ 4·8825	− 0·0611	+ 0·005	+ 10·818	+ 0·595	− 0·04	1178
277	Lacaille 3275 ...	+ 0·9233	− 0·0157	...	+ 11·026	+ 0·108	...	...
278	q Puppis	+ 2·2539	+ 0·0020	− 0·017	+ 11·068	+ 0·269	+ 0·11	Stone
279	31 Lyncis	+ 4·1316	− 0·0311	+ 0·001	+ 11·104	+ 0·497	+ 0·11	1183
280	Radcliffe 2130 ...	+ 4·5825	− 0·0492	...	+ 11·110	+ 0·552	...	...

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
281	*w* Puppis	5·0	5	8	16	34·69	122	40	1·9	5	0·15
282	Lacaille 3308	5·2	5	8	18	46·42	138	5	57·0	5	0·15
283	Taylor 3582	5·6	3	8	19	33·88	93	30	35·0	3	0·23
284	Taylor 3589	6·0	3	8	19	47·76	113	39	4·3	3	0·23
285	Taylor 3590	9·2	5	8	19	50·80	113	39	1·5	5	0·25
286	1 Ursæ Majoris *o*... ...	3·4	...	8	20	7·00	28	52	33·1	5	0·17
287	2 Ursæ Majoris A ...	5·3	...	8	23	40·18	24	26	26·1	2	0·25
288	β Volantis...	5·0	5	8	24	24·37	155	43	48·1	5	0·15
289	33 Cancri η	5·5	...	8	25	39·10	69	8	44·7	10	0·20
290	4 Ursæ Majoris π^2 ...	4·8	...	8	29	32·00	25	14	51·5	5	0·24
291	Taylor 3702	5·5	3	8	31	0·21	139	31	28·4	3	0·23
292	4 Hydræ δ...	4·1	...	8	31	11·75	83	52	18·3	5	0·15
293	Taylor 3717	5·7	2	8	32	13·57	140	32	49·4	2	0·24
294	*e* Velorum...	5·0	5	8	33	21·25	132	33	46·4	5	0·16
295	*f* Mali	5·5	5	8	34	38·67	119	7	39·9	5	0·26
296	Taylor 3742	6·0	1	8	35	16·80	142	39	39·8	1	0·28
297	*b* Mali	5·0	5	8	35	19·69	124	52	34·4	5	0·15
298	*d* Carinæ	5·0	5	8	37	55·15	149	19	34·4	5	0·25
299	*a* Mali	4·4	5	8	38	41·43	122	44	50·7	5	0·22
300	48 Cancri ι	4·2	...	8	39	18·86	60	47	41·2	1	0·24
301	11 Hydræ ϵ	3·6	...	8	40	18·73	83	8	2·8	3	0·19
302	*a* Velorum...	5·0	5	8	41	53·47	135	35	46·5	5	0·25
303	13 Hydræ ρ	4·3	...	8	41	58·04	83	42	43·6	2	0·25
304	14 Hydræ	5·1	...	8	43	13·94	92	59	29·5	4	0·27
305	*f* Carinæ	5·1	5	8	43	33·30	146	19	18·6	5	0·22
306	*g* Velorum...	5·5	5	8	45	34·55	134	51	16·8	5	0·24
307	16 Hydræ ζ	3·3	...	8	48	56·79	83	35	26·8	5	0·24
308	R. P. L. 60	7·0	...	8	49	35·06	5	20	0·7	1	0·20
309	8 Ursæ Majoris ρ... ...	5·0	...	8	51	31·03	21	53	47·1	3	0·28
310	*c* Carinæ	5·4	6	8	52	17·11	150	10	43·2	6	0·25
311	12 Ursæ Majoris κ ...	3·7	...	8	55	17·35	42	21	43·4	5	0·24
312	11 Ursæ Majoris σ^1 ...	5·3	...	8	57	39·32	22	38	18·0	3	0·28
313	Radcliffe 2271	5·1	5	8	58	45·90	51	3	40·0	5	0·25
314	13 Ursæ Majoris σ^2 ...	4·8	...	8	59	38·80	22	22	17·4	1	0·24
315	*c* Velorum...	5·0	5	8	59	56·90	136	36	46·8	5	0·21

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	*″*	*″*	*″*	
281	w Puppis	+ 2·3628	+ 0·0020	...	+ 11·256	+ 0·280	...	...
282	Lacaille 3308 ...	+ 1·8471	+ 0·0002	− 0·007	+ 11·414	+ 0·217	− 0·01	Stone
283	Taylor 3582	+ 3·0050	− 0·0032	...	+ 11·472	+ 0·356	...	...
284	Taylor 3589	+ 2·5923	+ 0·0011	...	+ 11·488	+ 0·305	...	...
285	Taylor 3590	+ 2·5924	+ 0·0011	...	+ 11·492	+ 0·305	...	...
286	1 Ursæ Majoris o ...	+ 5·0573	− 0·0763	− 0·019	+ 11·511	+ 0·599	+ 0·11	1186
287	2 Ursæ Majoris A ...	+ 5·4546	− 0·1036	− 0·010	+ 11·764	+ 0·640	+ 0·06	1195
288	β Volantis	+ 0·6764	− 0·0251	− 0·009	+ 11·816	+ 0·075	+ 0·12	Stone
289	33 Cancri η	+ 3·4821	− 0·0129	− 0·004	+ 11·904	+ 0·404	+ 0·05	1207
290	4 Ursæ Majoris π^2 ...	+ 5·3249	− 0·1002	− 0·011	+ 12·176	+ 0·613	− 0·02	1206
291	Taylor 3702	+ 1·8335	+ 0·0003	...	+ 12·278	+ 0·207	...	...
292	4 Hydræ δ	+ 3·1857	− 0·0065	− 0·007	+ 12·292	+ 0·362	+ 0·00	1217
293	Taylor 3717	+ 1·7931	− 0·0002	...	+ 12·362	+ 0·201	...	...
294	e Velorum	+ 2·1093	+ 0·0023	...	+ 12·440	+ 0·236	+ 0·02	Stone
295	f Mali...	+ 2·4906	+ 0·0023	...	+ 12·528	+ 0·279	...	...
296	Taylor 3742	+ 1·7069	− 0·0012	...	+ 12·572	+ 0·189	...	...
297	b Mali	+ 2·3464	+ 0·0028	...	+ 12·575	+ 0·262	...	...
298	d Carinæ	+ 1·3326	− 0·0080	...	+ 12·750	+ 0·145	+ 0·02	Stone
299	a Mali	+ 2·4104	+ 0·0028	...	+ 12·803	+ 0·266	...	...
300	48 Cancri ι	+ 3·6462	− 0·0194	− 0·002	+ 12·844	+ 0·403	+ 0·03	1239
301	11 Hydræ ϵ	+ 3·1954	− 0·0071	− 0·014	+ 12·912	+ 0·351	+ 0·02	1243
302	a Velorum	+ 2·0339	+ 0·0023	− 0·009	+ 13·017	+ 0·220	− 0·04	Stone
303	13 Hydræ ρ	+ 3·1843	− 0·0068	− 0·003	+ 13·022	+ 0·347	+ 0·02	1248
304	14 Hydræ	+ 3·0194	− 0·0035	...	+ 13·106	+ 0·328	...	...
305	f Carinæ	+ 1·5555	− 0·0035	...	+ 13·127	+ 0·165	+ 0·02	Stone
306	g Velorum	+ 2·0744	+ 0·0028	...	+ 13·261	+ 0·221	...	...
307	16 Hydræ ζ	+ 3·1834	− 0·0069	− 0·008	+ 13·480	+ 0·338	− 0·02	1261
308	R. P. L. 60	+ 13·6483	− 1·7103	...	+ 13·521	+ 0·464	...	...
309	8 Ursæ Majoris ρ ...	+ 5·5099	− 0·1365	− 0·004	+ 13·646	+ 0·584	− 0·02	1257
310	c Carinæ	+ 1·3685	− 0·0078	...	+ 13·695	+ 0·140	...	...
311	12 Ursæ Majoris κ ...	+ 4·1300	− 0·0434	− 0·004	+ 13·886	+ 0·429	+ 0·07	1272
312	11 Ursæ Majoris σ^1...	+ 5·3621	− 0·1305	+ 0·001	+ 14·035	+ 0·554	+ 0·05	1271
313	Radcliffe 2271 ...	+ 3·8402	− 0·0303	...	+ 14·104	+ 0·393	...	...
314	13 Ursæ Majoris σ^2...	+ 5·3726	− 0·1336	+ 0·000	+ 14·159	+ 0·550	+ 0·06	1276
315	c Velorum	+ 2·0719	+ 0·0035	− 0·018	+ 14·177	+ 0·208	− 0·14	Stone

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.	
				h.	*m.*	*s.*	°	′	″			
316	14 Ursæ Majoris τ ...	4·8	...	9	0	50·43	25	59	28·7	1	0·26	
317	Taylor 3991	5·6	2	9	2	41·54	115	22	1·7	2	0·22	
318	E Carinæ	5·5	3	9	4	38·16	160	2	54·7	3	0·27	
319	16 Ursæ Majoris *c* ...	5·2	...	9	4	40·98	28	4	31·8	5	0·24	
320	*e* Mali	5·5	3	9	4	46·43	119	52	4·7	3	0·28	
321	18 Ursæ Majoris *e* ...	4·9	...	9	7	24·22	35	28	32·1	3	0·25	
322	*a* Carinæ	5·0	5	9	7	45·35	148	28	3·8	5	0·22	
323	*l* Velorum	5·0	2	9	10	48·51	128	3	43·3	2	0·28	
324	k^2 Velorum	5·5	2	9	10	52·35	126	54	19·1	2	0·27	
325	83 Cancri	6·6	...	9	12	10·26	71	46	43·4	6	0·21	
326	*g* Carinæ	5·4	3	9	12	45·41	147	1	52·8	3	0·24	
327	26 Hydræ	4·9	...	9	13	53·93	101	27	37·2	6	0·25	
328	27 Hydræ	4·9	...	9	14	31·61	99	2	19·8	4	0·27	
329	*h* Mali	5·0	5	9	16	5·40	115	26	48·9	5	0·22	
330	1 Leonis κ	4·6	...	9	17	32·88	63	17	34·0	2	0·26	
331	*k* Carinæ	5·4	4	9	18	0·05	151	53	8·4	4	0·25	
332	30 Hydræ *a*, Var. 2 ...	Var	...	9	21	35·48	98	7	49·1	4	0·22	
333	Argelander 196	5·0	3	9	21	44·37	95	32	20·3	3	0·27	
334	23 Ursæ Majoris *h* ...	3·7	...	9	21	53·90	26	24	22·6	5	0·25	
335	31 Hydræ τ^1	4·9	...	9	22	57·27	92	14	~~49~~ 2·8	3	0·32	[9·8]
336	*n* Carinæ	5·3	5	9	24	~~5·14~~ 16	154	24	5·5	5	0·27	
337	ϵ Antliæ	5·5	4	9	24	12·60	125	25	6·5	4	0·20	
338	ζ^1 Antliæ—1st	6·2	3	9	25	32·39	121	21	17·7	3	0·25	
339	ζ^1 Antliæ—2nd	6·0	1	9	25	32·82	121	21	11·3	1	0·23	
340	ζ^2 Antliæ	6·0	3	9	26	19·08	121	20	6·7	3	0·27	
341	10 Leonis Minoris ...	4·7	...	9	26	44·63	53	3	39·6	3	0·29	
342	Taylor 4218	5·0	1	9	27	30·88	146	29	48·7	1	0·26	
343	Lacaille 3917	5·5	5	9	29	~~21·76~~ 21·6	138	27	~~51·0~~ 41·7	5	0·27	[49·7]
344	Taylor 4233	5·5	2	9	29	54·93	140	42	44·2	2	0·32	
345	*h* Carinæ	5·0	5	9	30	54·18	148	41	9·1	5	0·23	
346	*y* Velorum	5·5	3	9	33	15·59	132	38	26·9	3	0·27	
347	35 Hydræ *i*	4·2	...	9	33	37·58	90	35	22·7	3	0·27	
348	38 Hydræ κ	4·9	...	9	34	27·41	103	46	45·8	2	0·32	
349	*m* Carinæ	5·1	5	9	35	58·33	150	46	34·8	5	0·24	
350	28 Ursæ Majoris	5·1	5	9	36	31·41	25	47	9·9	5	0·29	

5·19

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	"	"	"	
316	14 Ursæ Majoris τ ...	+ 5·0042	− 0·1036	+ 0·014	+ 14·232	+ 0·509	+ 0·07	1279
317	Taylor 3991	+ 2·6294	+ 0·0028	...	+ 14·346	+ 0·263	...	...
318	E Carinæ	+ 0·5213	− 0·0426	− 0·001	+ 14·464	+ 0·047	+ 0·02	Stone
319	16 Ursæ Majoris c ...	+ 4·8080	− 0·0913	− 0·002	+ 14·467	+ 0·480	+ 0·03	1288
320	e Mali	+ 2·5408	+ 0·0037	...	+ 14·473	+ 0·251	...	...
321	18 Ursæ Majoris c ...	+ 4·3553	− 0·0616	+ 0·006	+ 14·631	+ 0·433	− 0·07	1297
322	a Carinæ	+ 1·5844	− 0·0029	...	+ 14·653	+ 0·152	...	...
323	l Velorum	+ 2·3678	+ 0·0051	− 0·015	+ 14·834	+ 0·227	+ 0·08	Stone
324	k^2 Velorum	+ 2·3967	+ 0·0050	...	+ 14·837	+ 0·229	...	...
325	83 Cancri	+ 3·3665	− 0·0134	− 0·009	+ 14·913	+ 0·323	+ 0·14	1309
326	g Carinæ	+ 1·6981	− 0·0004	...	+ 14·948	+ 0·159	...	...
327	26 Hydræ	+ 2·8926	− 0·0004	− 0·003	+ 15·014	+ 0·274	− 0·02	1314
328	27 Hydræ	+ 2·9317	− 0·0012	− 0·002	+ 15·050	+ 0·277	+ 0·01	1317
329	h Mali	+ 2·6551	+ 0·0035	...	+ 15·140	+ 0·247	...	...
330	1 Leonis κ	+ 3·5101	− 0·0191	− 0·003	+ 15·224	+ 0·327	+ 0·04	1320
331	k Carinæ	+ 1·4472	− 0·0063	...	+ 15·250	+ 0·130	...	...
332	30 Hydræ α	+ 2·9505	− 0·0013	− 0·002	+ 15·452	+ 0·268	− 0·05	1330
333	Argelander 196 ...	+ 2·9896	− 0·0023	...	+ 15·460	+ 0·271	...	...
334	23 Ursæ Majoris h ...	+ 4·7861	− 0·0926	+ 0·014	+ 15·468	+ 0·438	− 0·03	1323
335	31 Hydræ τ^1 ...	+ 3·0392	− 0·0036	+ 0·008	+ 15·527	+ 0·274	+ 0·00	1334
336	n Carinæ	+ 1·3168	− 0·0105	...	+ 15·589	+ 0·114	...	...
337	ϵ Antliæ	+ 2·4746	+ 0·0059	...	+ 15·597	+ 0·220	...	...
338	ζ^1 Antliæ—1st ...	+ 2·5639	+ 0·0053	...	+ 15·670	+ 0·227	...	...
339	ζ^1 Antliæ—2nd ...	+ 2·5640	+ 0·0053	...	+ 15·670	+ 0·227	...	...
340	ζ^2 Antliæ	+ 2·5665	+ 0·0053	...	+ 15·712	+ 0·226	...	...
341	10 Leonis Minoris ...	+ 3·6955	− 0·0295	+ 0·001	+ 15·735	+ 0·327	+ 0·01	1340
342	Taylor 4218	+ 1·8255	+ 0·0028	− 0·015	+ 15·777	+ 0·157	+ 0·01	Stone
343	Lacaille 3917 ...	+ 2·1502	+ 0·0067	...	+ 15·877	+ 0·185	...	...
344	Taylor 4233	+ 2·0770	+ 0·0063	...	+ 15·905	+ 0·178	...	...
345	h Carinæ	+ 1·7413	+ 0·0014	...	+ 15·959	+ 0·147	...	...
346	y Velorum	+ 2·3367	+ 0·0075	...	+ 16·083	+ 0·197	...	...
347	35 Hydræ ι	+ 3·0641	− 0·0041	+ 0·002	+ 16·102	+ 0·260	+ 0·06	1356
348	38 Hydræ κ	+ 2·8777	+ 0·0009	− 0·002	+ 16·144	+ 0·242	− 0·01	1362
349	m Carinæ	+ 1·6673	+ 0·0000	...	+ 16·224	+ 0·136	− 0·00	Stone
350	28 Ursæ Majoris ...	+ 4·6937	− 0·1081	+ 0·002	+ 16·251	+ 0·395	+ 0·03	1355

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.	
				h.	*m.*	*s.*	°	′	″			
316	14 Ursæ Majoris τ ...	4·8	...	9	0	50·43	25	59	28·7	1	0·26	
317	Taylor 3991	5·6	2	9	2	41·54	115	22	1·7	2	0·22	
318	E Carinæ	5·5	3	9	4	38·16	160	2	54·7	3	0·27	
319	16 Ursæ Majoris c ...	5·2	...	9	4	40·98	28	4	31·8	5	0·24	
320	e Mali	5·5	3	9	4	46·43	119	52	4·7	3	0·28	
321	18 Ursæ Majoris e ...	4·9	...	9	7	24·22	35	28	32·1	3	0·25	
322	a Carinæ	5·0	5	9	7	45·35	148	28	3·8	5	0·22	
323	l Velorum	5·0	2	9	10	48·51	128	3	43·3	2	0·28	
324	k^2 Velorum	5·5	2	9	10	52·35	126	54	19·1	2	0·27	
325	83 Cancri	6·6	...	9	12	10·26	71	46	43·4	6	0·21	
326	g Carinæ	5·4	3	9	12	45·41	147	1	52·8	3	0·24	
327	26 Hydræ	4·9	...	9	13	53·93	101	27	37·2	6	0·25	
328	27 Hydræ	4·9	...	9	14	31·61	99	2	19·8	4	0·27	
329	h Mali	5·0	5	9	16	5·40	115	26	48·9	5	0·22	
330	1 Leonis κ	4·6	...	9	17	32·88	63	17	34·0	2	0·26	
331	k Carinæ	5·4	4	9	18	0·95	151	53	8·4	4	0·25	
332	30 Hydræ a, Var. 2 ...	Var	...	9	21	35·48	98	7	49·1	4	0·22	
333	Argelander 196	5·0	3	9	21	44·37	95	32	20·3	3	0·27	
334	23 Ursæ Majoris h ...	3·7	...	9	21	53·90	26	24	22·6	5	0·25	
335	31 Hydræ τ^1	4·9	...	9	22	57·27	92	14	9·8 4·9	3	0·32	[9·8]
336	n Carinæ	5·3	5	9	24	5·19	154	24	5·5	5	0·27	5·19
337	ϵ Antliæ	5·5	4	9	24	12·60	125	25	6·5	4	0·20	
338	ζ^1 Antliæ—1st	6·2	3	9	25	32·39	121	21	17·7	3	0·25	
339	ζ^1 Antliæ—2nd	6·0	1	9	25	32·82	121	21	11·3	1	0·23	
340	ζ^2 Antliæ	6·0	3	9	26	19·08	121	20	6·7	3	0·27	
341	10 Leonis Minoris ...	4·7	...	9	26	44·63	53	3	39·6	3	0·29	
342	Taylor 4218	5·0	1	9	27	30·88	146	29	48·7	1	0·26	
343	Lacaille 3917	5·5	5	9	29	21·76	138	27	41·7 51·0	5	0·27	[49·7]
344	Taylor 4233	5·5	2	9	29	54·93	140	42	44·2	2	0·32	
345	h Carinæ	5·0	5	9	30	54·18	148	41	9·1	5	0·23	
346	y Velorum	5·5	3	9	33	15·59	132	38	26·9	3	0·27	
347	35 Hydræ ι	4·2	...	9	33	37·58	90	35	22·7	3	0·27	
348	38 Hydræ κ	4·9	...	9	34	27·41	103	46	45·8	2	0·32	
349	m Carinæ	5·1	5	9	35	58·33	150	46	34·8	5	0·24	
350	28 Ursæ Majoris	5·1	5	9	36	31·41	25	47	9·9	5	0·29	

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	″	″	″	
351	θ Antliæ	+ 2·6750	+ 0·0052	...	+ 16·366	+ 0·219	...	...
352	17 Leonis ϵ	+ 3·4214	− 0·0180	− 0·004	+ 16·373	+ 0·282	+ 0·01	1368
353	29 Ursæ Majoris υ ...	+ 4·3610	− 0·0821	− 0·039	+ 16·543	+ 0·353	+ 0·15	1371
354	30 Ursæ Majoris ϕ ...	+ 4·1269	− 0·0634	− 0·000	+ 16·616	+ 0·331	− 0·03	1375
355	39 Hydræ υ^1 ...	+ 2·8840	+ 0·0015	− 0·001	+ 16·704	+ 0·226	+ 0·02	1388
356	R. P. L. 70	+ 10·6001	− 1·5473	...	+ 16·856	+ 0·830	...	...
357	η Antliæ	+ 2·5763	+ 0·0085	...	+ 17·083	+ 0·190	...	...
358	29 Leonis π	+ 3·1785	− 0·0080	− 0·004	+ 17·088	+ 0·236	+ 0·01	1398
359	21 Leonis Minoris ...	+ 3·5542	− 0·0285	+ 0·004	+ 17·378	+ 0·252	− 0·02	1401
360	15 Sextantis	+ 3·0749	− 0·0038	− 0·003	+ 17·441	+ 0·215	− 0·02	1407
361	32 Leonis α	+ 3·2191	− 0·0102	− 0·018	+ 17·449	+ 0·225	− 0·02	1406
362	Rumker 193	+ 1·9133	+ 0·0092	...	+ 17·503	+ 0·133	...	...
363	Taylor 4522	+ 2·2678	+ 0·0122	...	+ 17·555	+ 0·152	...	...
364	41 Hydræ λ	+ 2·9381	+ 0·0015	− 0·015	+ 17·567	+ 0·199	+ 0·07	1412
365	Taylor 4559	+ 2·3116	+ 0·0131	...	+ 17·735	+ 0·150	...	...
366	32 Ursæ Majoris ...	+ 4·4503	− 0·1154	− 0·016	+ 17·754	+ 0·295	+ 0·01	1415
367	33 Ursæ Majoris λ ...	+ 3·6599	− 0·0386	− 0·017	+ 17·777	+ 0·240	+ 0·06	1421
368	36 Leonis ζ	+ 3·3477	− 0·0175	0·000	+ 17·785	+ 0·218	− 0·02	1425
369	Lacaille 4233... ...	+ 1·7013	+ 0·0035	...	+ 17·790	+ 0·107	...	...
370	R. P. L. 72	+ 9·8518	− 1·6133	− 0·096	+ 17·854	+ 0·646	− 0·04	1399
371	q Carinæ	+ 1·9990	+ 0·0115	− 0·014	+ 17·909	+ 0·123	− 0·02	Stone
372	41 Leonis γ^1... ...	+ 3·2963	− 0·0148	+ 0·021	+ 17·917	+ 0·208	+ 0·14	1432
373	Taylor 4616	+ 2·2460	+ 0·0141	− 0·013	+ 17·987	+ 0·137	+ 0·04	Stone
374	Radcliffe 2485 ...	+ 4·4081	− 0·1175	...	+ 17·998	+ 0·276	...	...
375	Taylor 4634	+ 2·2246	+ 0·0146	− 0·013	+ 18·039	+ 0·134	+ 0·05	Stone
376	Lacaille 4270 ...	+ 2·3487	+ 0·0147	...	+ 18·041	+ 0·142	...	...
377	r Velorum	+ 2·5672	+ 0·0128	− 0·006	+ 18·068	+ 0·155	− 0·03	Stone
378	γ Antliæ	+ 2·7538	+ 0·0088	− 0·004	+ 18·113	+ 0·165	− 0·10	Stone
379	30 Leonis Minoris ...	+ 3·4633	− 0·0266	− 0·006	+ 18·135	+ 0·207	+ 0·05	1445
380	Lacaille 4296 ...	+ 1·7782	+ 0·0072	...	+ 18·151	+ 0·102	...	...
381	31 Leonis Minoris β...	+ 3·4998	− 0·0297	− 0·011	+ 18·205	+ 0·206	+ 0·08	1448
382	α Antliæ	+ 2·7450	+ 0·0097	− 0·010	+ 18·233	+ 0·159	+ 0·03	Stone
383	36 Ursæ Majoris ...	+ 3·9067	− 0·0671	− 0·024	+ 18·278	+ 0·227	+ 0·04	1454
384	Taylor 4694	+ 2·2250	+ 0·0163	...	+ 18·280	+ 0·126	+ 0·03	Stone
385	s Carinæ	+ 2·1930	+ 0·0161	+ 0·003	+ 18·300	+ 0·123	+ 0·03	Stone

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
386	Brisbane 3024	5·0	2	10	23	34·38	155	4	57·7	2	0·32
387	Taylor 4700	5·9	1	10	23	50·98	119	2	24·2	1	0·39
388	δ Antliæ...	5·8	1	10	23	58·76	119	58	59·4	1	0·22
389	Radcliffe 2510	5·1	3	10	26	6·38	48	56	49·2	3	0·36
390	47 Leonis ρ	4·0	...	10	26	23·16	80	3	56·0	6	0·26
391	34 Leonis Minoris ...	5·5	...	10	26	32·23	54	22	58·4	3	0·36
392	Lacaille 4357	5·8	1	10	27	15·24	161	21	59·0	1	0·24
393	37 Ursæ Majoris	5·2	...	10	27	17·44	32	17	20·6	4	0·32
394	Taylor 4773	7·1	5	10	31	10·24	147	35	33·7	5	0·27
395	t^1 Carinæ	5·4	5	10	31	46·27	148	55	50·3	5	0·31
396	37 Leonis Minoris ...	4·8	...	10	31	51·00	57	23	23·9	4	0·33
397	*p* Velorum	5·1	5	10	32	10·65	137	35	32·3	5	0·25
398	ϕ^3 Hydræ	5·2	...	10	32	38·13	106	14	36·0	2	0·32
399	38 Ursæ Majoris	5·0	...	10	33	36·07	23	38	41·4	1	0·33
400	t^2 Carinæ	5·0	4	10	34	6·55	148	32	53·7	4	0·32
401	... ...	9·0	1	10	35	34·41	149	9	57·6	1	0·34
402	Taylor 4833	5·5	5	10	37	54·37	153	49	42·1	5	0·31
403	Taylor 4844	5·4	5	10	38	53·78	149	55	35·5	5	0·26
404	42 Leonis Minoris ...	5·4	...	10	39	4·63	58	40	33·1	5	0·29
405	Taylor 4873	5·5	5	10	42	2·31	146	6	51·9	5	0·28
406	53 Leonis *l*	5·3	...	10	42	50·60	78	48	32·5	18	0·34
407	46 Leonis Minoris ...	3·9	...	10	46	29·07	55	7	39·2	5	0·26
408	45 Ursæ Majoris ω ...	5·0	5	10	46	56·93	46	9	37·8	5	0·33
409	b^3 Hydræ	5·2	...	10	47	31·42	109	28	54·9	5	0·29
410	*u* Carinæ	5·0	5	10	48	32·22	148	12	19·7	5	0·32
411	54 Leonis	4·3	...	10	49	0·39	64	35	58·8	5	0·31
412	ι Antliæ	5·5	5	10	51	2·12	126	28	54·3	5	0·27
413	60 Leonis *b*	4·5	...	10	55	49·02	69	9	57·3	5	0·25
414	63 Leonis χ	4·7	...	10	58	43·36	82	0	15·3	14	0·32
415	R. P. L. 79	7·7	...	10	59	3·84	1	41	52·6	3	0·82
416	χ^1 Hydræ	5·2	...	10	59	27·23	116	38	6·4	5	0·26
417	χ^2 Hydræ	5·6	...	11	0	2·74	116	37	43·2	5	0·27
418	Taylor 5054	5·1	3	11	1	18·73	148	0	56·2	3	0·36
419	52 Ursæ Majoris ψ ...	3·1	...	11	2	47·98	44	50	22·3	5	0·34
420	Taylor 5068	5·0	5	11	2	49·79	117	25	10·2	5	0·34

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	″	″	″	
386	Brisbane 3024 ...	+ 1·8968	+ 0·0113	...	+ 18·305	+ 0·105	...	...
387	Taylor 4700	+ 2·7699	+ 0·0093	...	+ 18·315	+ 0·157	...	...
388	δ Antliæ	+ 2·7585	+ 0·0097	...	+ 18·320	+ 0·156	...	...
389	Radcliffe 2510 ...	+ 3·5381	− 0·0342	...	+ 18·394	+ 0·197	...	...
390	47 Leonis ρ	+ 3·1653	− 0·0080	− 0·001	+ 18·404	+ 0·176	− 0·01	1467
391	34 Leonis Minoris ...	+ 3·4521	− 0·0276	− 0·006	+ 18·409	+ 0·192	− 0·02	1465
392	Lacaille 4357 ...	+ 1·5111	− 0·0034	...	+ 18·434	+ 0·079	...	...
393	37 Ursæ Majoris ...	+ 3·9049	− 0·0703	+ 0·005	+ 18·436	+ 0·217	− 0·04	1464
394	Taylor 4773	+ 2·2764	+ 0·0187	...	+ 18·567	+ 0·118	...	...
395	t^1 Carinæ	+ 2·2390	+ 0·0187	...	+ 18·586	+ 0·115	...	...
396	37 Leonis Minoris ...	+ 3·3932	− 0·0242	− 0·001	+ 18·589	+ 0·178	− 0·03	1475
397	*p* Velorum	+ 2·5250	+ 0·0171	− 0·017	+ 18·600	+ 0·130	+ 0·03	Stone
398	ϕ^3 Hydræ	+ 2·9273	+ 0·0048	− 0·010	+ 18·615	+ 0·151	− 0·05	1479
399	38 Ursæ Majoris ...	+ 4·1963	− 0·1130	− 0·029	+ 18·646	+ 0·218	+ 0·08	1476
400	t^2 Carinæ	+ 2·2721	+ 0·0195	0·000	+ 18·662	+ 0·113	− 0·10	Stone
401	... ...	+ 2·2658	+ 0·0199	...	+ 18·708	+ 0·112	...	...
402	Taylor 4833	+ 2·1185	+ 0·0196	− 0·002	+ 18·781	+ 0·100	+ 0·05	Stone
403	Taylor 4844	+ 2·2721	+ 0·0211	...	+ 18·811	+ 0·107	...	...
404	42 Leonis Minoris ...	+ 3·3536	− 0·0227	− 0·004	+ 18·817	+ 0·162	+ 0·02	1490
405	Taylor 4873	+ 2·4081	+ 0·0218	...	+ 18·905	+ 0·109	...	...
406	53 Leonis *l*	+ 3·1597	− 0·0080	− 0·002	+ 18·928	+ 0·145	+ 0·02	1500
407	46 Leonis Minoris ...	+ 3·3660	− 0·0257	+ 0·005	+ 19·031	+ 0·147	+ 0·25	1509
408	45 Ursæ Majoris ω ...	+ 3·4747	− 0·0319	+ 0·002	+ 19·044	+ 0·151	+ 0·03	1510
409	b^3 Hydræ	+ 2·9252	+ 0·0073	− 0·004	+ 19·060	+ 0·125	+ 0·05	1507
410	*u* Carinæ	+ 2·4106	+ 0·0244	0·000	+ 19·087	+ 0·100	+ 0·02	Stone
411	54 Leonis	+ 3·2658	− 0·0172	− 0·007	+ 19·100	+ 0·137	− 0·01	1515
412	*i* Antliæ	+ 2·7793	+ 0·0154	+ 0·006	+ 19·153	+ 0·112	+ 0·13	Stone
413	60 Leonis *b*	+ 3·2129	− 0·0136	− 0·003	+ 19·273	+ 0·122	− 0·05	1529
414	63 Leonis χ	+ 3·1218	− 0·0056	− 0·026	+ 19·341	+ 0·113	+ 0·02	1535
415	R. P. L. 79	+ 14·9223	− 8·4792	...	+ 19·350	+ 0·564	...	...
416	χ^1 Hydræ	+ 2·8971	+ 0·0115	− 0·017	+ 19·358	+ 0·103	+ 0·01	1536
417	χ^2 Hydræ	+ 2·8988	+ 0·0115	+ 0·001	+ 19·372	+ 0·102	+ 0·01	1538
418	Taylor 5054	+ 2·5300	+ 0·0287	...	+ 19·401	+ 0·086	...	...
419	52 Ursæ Majoris ψ ...	+ 3·4043	− 0·0368	− 0·007	+ 19·432	+ 0·115	+ 0·04	1542
420	Taylor 5068	+ 2·9011	+ 0·0122	− 0·006	+ 19·434	+ 0·097	− 0·02	Stone

Mean Positions of Stars for 1878, *January* 1*st*.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
421	x Carinæ	5·4	5	11	3	22·97	148	18	51·3	5	0·27
422	Taylor 5077	5·2	5	11	4	1·59	121	42	18·5	5	0·34
423	68 Leonis δ	2·8	...	11	7	37·11	68	48	27·5	6	0·29
424	72 Leonis	4·9	...	11	8	42·89	66	14	23·1	5	0·29
425	53 Ursæ Majoris ξ ...	4·8	...	11	11	40·20	57	47	4·2	5	0·33
426	54 Ursæ Majoris ν ...	3·8	...	11	11	53·02	56	14	24·3	5	0·34
427	55 Ursæ Majoris	4·8	...	11	12	28·83	51	8	42·0	5	0·36
428	12 Crateris δ	3·9	...	11	13	14·46	104	7	6·0	20	0·30
429	Taylor 5193	7·6	5	11	16	46·51	147	42	55·9	5	0·26
430	Taylor 5195	5·5	6	11	17	18·18	125	29	43·7	6	0·36
431	Taylor 5198	7·8	2	11	17	18·46	147	38	46·3	2	0·32
432	14 Crateris ϵ	5·0	...	11	18	26·97	100	11	23·9	6	0·34
433	Radcliffe 2679	5·0	5	11	19	3·48	33	28	52·1	5	0·32
434	1 Draconis λ	4·1	...	11	24	8·70	19	59	45·6	5	0·26
435	17 Hydræ—2nd	5·0	...	11	26	13·75	118	35	34·0	5	0·31
436	Taylor 5282	5·5	5	11	26	52·33	120	24	50·7	5	0·38
437	91 Leonis ν	4·5	...	11	30	42·09	90	8	59·9	16	0·35
438	... ...	8·0	3	11	31	50·27	150	48	35·3	3	0·39
439	24 Crateris ι	5·6	...	11	32	28·26	102	31	48·7	5	0·38
440	o Hydræ	5·5	3	11	34	9·29	124	4	5·7	3	0·35
441	63 Ursæ Majoris χ ...	3·9	...	11	39	35·92	41	32	35·7	4	0·36
442	λ Muscæ	4·7	4	11	39	51·50	156	3	9·7	4	0·39
443	Taylor 5402	5·5	3	11	40	37·20	150	30	0·8	3	0·37
444	93 Leonis	4·6	...	11	41	41·39	69	6	10·9	3	0·38
445	94 Leonis β (*Deneb*) ...	2·2	...	11	42	50·22	74	44	46·5	6	0·40
446	55 Centauri	5·5	5	11	45	2·89	134	29	40·9	5	0·36
447	Taylor 5437	5·5	3	11	46	8·52	146	18	36·4	3	0·35
448	c Hydræ	5·7	5	11	47	17·53	124	23	12·7	5	0·38
449	31 Crateris	5·5	5	11	54	36·97	108	58	47·1	5	0·34
450	67 Centauri	5·6	5	11	57	20·80	131	45	3·3	5	0·38
451	θ^2 Crucis	5·4	4	11	58	3·01	152	29	11·9	4	0·40
452	R. P. L. 89	6·3	...	11	58	36·33	3	44	12·6	5	0·59
453	η Crucis	4·5	5	12	0	31·89	153	56	0·6	5	0·35
454	2 Corvi ϵ	3·1	...	12	3	51·10	111	56	27·0	8	0·39
455	Radcliffe 2811	5·6	5	12	6	28·31	11	42	19·4	5	0·41

452.—Groombridge 1850.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
421	ϖ Carinæ	+ 2·5426	+ 0·0297	...	+ 19·445	+ 0·083	...	...
422	Taylor 5077	+ 2·8724	+ 0·0145	...	+ 19·459	+ 0·094	...	...
423	68 Leonis δ	+ 3·1897	− 0·0132	+ 0·010	+ 19·533	+ 0·098	+ 0·12	1546
424	72 Leonis	+ 3·2028	− 0·0150	− 0·004	+ 19·555	+ 0·096	− 0·00	1549
425	53 Ursæ Majoris ξ ...	+ 3·2486	− 0·0216	− 0·037	+ 19·610	+ 0·093	+ 0·57	1553
426	54 Ursæ Majoris ν ...	+ 3·2585	− 0·0227	+ 0·001	+ 19·615	+ 0·091	− 0·05	1554
427	55 Ursæ Majoris ...	+ 3·2940	− 0·0278	− 0·006	+ 19·625	+ 0·091	+ 0·07	1555
428	12 Crateris δ... ...	+ 3·0041	+ 0·0064	− 0·011	+ 19·638	+ 0·081	− 0·21	1557
429	Taylor 5193	+ 2·6755	+ 0·0341	...	+ 19·698	+ 0·065	...	...
430	Taylor 5195	+ 2·8956	+ 0·0181	...	+ 19·707	+ 0·072	...	...
431	Taylor 5198	+ 2·6814	+ 0·0342	...	+ 19·709	+ 0·065	...	...
432	14 Crateris ϵ ...	+ 3·0289	+ 0·0047	− 0·004	+ 19·725	+ 0·072	− 0·05	1563
433	Radcliffe 2679 ...	+ 3·4314	− 0·0556	...	+ 19·736	+ 0·088	...	...
434	1 Draconis λ... ...	+ 3·6444	− 0·1119	− 0·009	+ 19·809	+ 0·074	+ 0·03	1572
435	17 Hydræ—2nd ...	+ 2·9652	+ 0·0149	− 0·003	+ 19·837	+ 0·055	− 0·17	Stone
436	Taylor 5282	+ 2·9592	+ 0·0161	...	+ 19·844	+ 0·054	...	...
437	91 Leonis ν	+ 3·0718	+ 0·0003	− 0·002	+ 19·890	+ 0·049	− 0·05	1586
438	... ...	+ 2·7789	+ 0·0432	...	+ 19·903	+ 0·041	...	...
439	24 Crateris ι	+ 3·0366	+ 0·0068	+ 0·004	+ 19·910	+ 0·044	+ 0·13	1591
440	o Hydræ	+ 2·9705	+ 0·0192	− 0·005	+ 19·927	+ 0·040	− 0·08	1594
441	63 Ursæ Majoris χ ...	+ 3·2064	− 0·0358	− 0·015	+ 19·975	+ 0·033	− 0·03	1600
442	λ Muscæ	+ 2·8081	+ 0·0562	...	+ 19·977	+ 0·027	...	...
443	Taylor 5402	+ 2·8727	+ 0·0466	...	+ 19·983	+ 0·027	...	...
444	93 Leonis	+ 3·1130	− 0·0108	− 0·012	+ 19·990	+ 0·027	− 0·01	1603
445	94 Leonis β	+ 3·0996	− 0·0074	− 0·036	+ 19·998	+ 0·025	+ 0·10	1605
446	55 Centauri	+ 2·9862	+ 0·0135	...	+ 20·012	+ 0·020	...	...
447	Taylor 5437	+ 2·9511	+ 0·0423	...	+ 20·018	+ 0·017	...	...
448	c Hydræ	+ 3·0215	+ 0·0208	...	+ 20·023	+ 0·016	...	...
449	31 Crateris	+ 3·0617	+ 0·0121	− 0·003	+ 20·048	+ 0·002	− 0·03	1619
450	67 Centauri	+ 3·0584	+ 0·0281	...	+ 20·053	− 0·004	...	...
451	θ^2 Crucis	+ 3·0504	+ 0·0582	+ 0·002	+ 20·053	− 0·005	+ 0·05	Stone
452	R. P. L. 89	+ 3·1965	− 0·4852	...	+ 20·054	− 0·006	...	...
453	η Crucis	+ 3·0786	+ 0·0630	...	+ 20·051	− 0·010	...	...
454	2 Corvi ϵ	+ 3·0813	+ 0·0142	− 0·006	+ 20·051	− 0·016	− 0·02	1626
455	Radcliffe 2811 ...	+ 2·8900	− 0·1252	...	+ 20·045	− 0·055	...	...

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
456	Taylor 5607—2nd ...	5·5	5	12	7	40·30	135	2	42·8	5	0·35
457	6 Comæ	5·1	...	12	9	48·51	74	25	18·8	5	0·37
458	2 Canum Venaticorum ...	6·0	...	12	10	0·70	48	39	37·3	5	0·42
459	7 Comæ	5·2	...	12	10	10·11	65	22	33·8	2	0·41
460	*l* Canum Venaticorum ...	5·1	...	12	10	22·15	56	15	23·4	3	0·42
461	ζ Crucis	5·0	2	12	11	50·28	153	19	30·3	2	0·36
462	15 Virginis η	4·0	...	12	13	39·85	89	59	17·8	4	0·36
463	5 Corvi ζ	5·5	...	12	14	14·70	111	32	13·5	5	0·38
464	R.P.L. 93	6·7	...	12	14	19·31	1	37	26·4	1	0·86
465	11 Comæ	4·9	...	12	14	33·08	71	31	57·8	1	0·37
466	12 Comæ	4·8	...	12	16	22·33	63	28	36·5	2	0·34
467	6 Corvi	5·9	...	12	17	0·31	114	9	47·0	1	0·37
468	13 Comæ	5·1	...	12	18	11·08	63	13	27·8	3	0·39
469	14 Comæ	5·1	...	12	20	17·91	62	3	19·0	4	0·40
470	15 Comæ γ	4·7	...	12	20	51·31	61	3	10·1	3	0·36
471	16 Comæ	5·1	...	12	20	53·35	62	29	53·6	2	0·38
472	σ Centauri	4·5	1	12	21	26·71	139	33	14·9	1	0·36
473	*u* Centauri	5·2	4	12	21	53·43	128	21	56·3	4	0·40
474	8 Corvi η	4·4	...	12	25	46·90	105	31	11·5	5	0·39
475	8 Canum Venaticorum β...	4·3	...	12	27	56·70	47	58	44·9	5	0·34
476	9 Corvi β	2·8	...	12	27	58·91	112	43	16·3	2	0·44
477	5 Draconis κ	3·8	...	12	28	16·55	19	32	18·0	3	0·38
478	23 Comæ	4·9	...	12	28	46·57	66	41	55·0	3	0·40
479	24 Comæ—2nd	5·0	...	12	29	0·48	70	57	2·7	5	0·40
480	τ Centauri	5·3	1	12	31	2·10	137	52	9·5	1	0·41
481	*d* Hydræ	5·5	...	12	31	14·33	116	27	50·1	4	0·38
482	*l* Centauri	5·2	5	12	33	16·56	129	18	55·4	5	0·39
483	30 Virginis ρ	5·1	...	12	35	42·50	79	5	28·9	5	0·39
484	Taylor 5839	5·6	3	12	35	50·77	138	8	32·8	3	0·40
485	ι Crucis	5·5	3	12	38	28·31	150	18	40·4	3	0·36
486	27 Comæ	5·3	...	12	40	32·99	72	45	20·2	4	0·37
487	Taylor 5906	5·8	5	12	45	14·20	129	0	57·4	5	0·39
488	Taylor 5918	5·6	4	12	46	13·12	138	16	44·0	4	0·39
489	κ Crucis	5·5	3	12	46	32·41	149	42	46·8	3	0·35
490	*n* Centauri	5·4	3	12	46	40·95	129	30	53·6	3	0·40

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	″	″	″	
456	Taylor 5607—2nd ...	+ 3·1171	+ 0·0331	...	+ 20·043	− 0·024	...	...
457	6 Comæ	+ 3·0563	− 0·0058	− 0·007	+ 20·035	− 0·028	+ 0·01	1639
458	2 Canum Venat. ...	+ 3·0212	− 0·0140	+ 0·003	+ 20·035	− 0·027	+ 0·03	1640
459	7 Comæ	+ 3·0451	− 0·0110	− 0·004	+ 20·035	− 0·028	0·00	1641
460	*l* Canum Venat. ...	+ 3·0319	− 0·0170	...	+ 20·034	− 0·028	...	...
461	ζ Crucis	+ 3·2096	+ 0·0670	...	+ 20·028	− 0·033	...	...
462	15 Virginis η ...	+ 3·0723	+ 0·0027	− 0·006	+ 20·018	− 0·035	+ 0·02	1647
463	5 Corvi ζ	+ 3·1050	+ 0·0147	− 0·009	+ 20·016	− 0·037	+ 0·04	1653
464	R. P. L. 93	+ 0·1274	+ 0·9684	− 0·090	+ 20·015	− 0·010	− 0·08	1672
465	11 Comæ	+ 3·0439	− 0·0071	− 0·010	+ 20·011	− 0·037	− 0·09	1654
466	12 Comæ	+ 3·0246	− 0·0117	− 0·002	+ 20·003	− 0·040	− 0·01	1658
467	6 Corvi	+ 3·1167	+ 0·0169	− 0·003	+ 19·999	− 0·042	+ 0·02	1659
468	13 Comæ	+ 3·0188	− 0·0116	− 0·002	+ 19·991	− 0·044	+ 0·02	1661
469	14 Comæ	+ 3·0095	− 0·0121	− 0·003	+ 19·976	− 0·047	+ 0·01	1665
470	15 Comæ γ	+ 3·0052	− 0·0127	− 0·008	+ 19·971	− 0·049	+ 0·09	1666
471	16 Comæ	+ 3·0089	− 0·0121	− 0·002	+ 19·971	− 0·049	+ 0·00	1667
472	σ Centauri	+ 3·2188	+ 0·0412	...	+ 19·966	− 0·052	...	...
473	*u* Centauri	+ 3·1731	+ 0·0282	...	+ 19·962	− 0·053	...	...
474	8 Corvi η	+ 3·1139	+ 0·0117	− 0·033	+ 19·927	− 0·060	+ 0·05	1681
475	8 Canum Venat. β ...	+ 2·9258	− 0·0207	− 0·065	+ 19·905	− 0·061	− 0·29	1686
476	9 Corvi β	+ 3·1404	+ 0·0164	− 0·003	+ 19·905	− 0·064	+ 0·05	1685
477	5 Draconis κ	+ 2·6088	− 0·0547	− 0·016	+ 19·902	− 0·056	+ 0·00	1689
478	23 Comæ	+ 3·0000	− 0·0087	...	+ 19·896	− 0·063	...	...
479	24 Comæ—2nd ...	+ 3·0140	− 0·0064	− 0·001	+ 19·894	− 0·064	− 0·03	1688
480	τ Centauri	+ 3·2719	+ 0·0404	...	+ 19·871	− 0·072	...	...
481	*d* Hydræ	+ 3·1627	+ 0·0193	...	+ 19·869	− 0·071	...	...
482	*l* Centauri	+ 3·2307	+ 0·0303	...	+ 19·844	− 0·077	...	...
483	30 Virginis ρ ...	+ 3·0323	− 0·0016	+ 0·003	+ 19·811	− 0·077	+ 0·09	1701
484	Taylor 5839	+ 3·3046	+ 0·0417	...	+ 19·809	− 0·084	...	...
485	ι Crucis	+ 3·4641	+ 0·0685	...	+ 19·772	− 0·092	...	...
486	27 Comæ	+ 2·9992	− 0·0045	...	+ 19·741	− 0·085	...	...
487	Taylor 5906	+ 3·2846	+ 0·0312	− 0·007	+ 19·665	− 0·102	− 0·03	Stone
488	Taylor 5918	+ 3·3726	+ 0·0435	...	+ 19·648	− 0·106	...	...
489	κ Crucis	+ 3·5339	+ 0·0693	...	+ 19·642	− 0·112	...	...
490	*n* Centauri	+ 3·2953	+ 0·0320	− 0·002	+ 19·640	− 0·105	+ 0·08	...

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
491	35 Comæ	5·1	...	12	47	17·46	68	5	31·0	3	0·43
492	*o* Centauri—1st	5·1	2	12	47	26·00	146	30	52·4	2	0·40
493	R. P. L. 98	6·6	...	12	48	6·68	5	55	4·4	2	0·36
494	R. P. L. 99	5·6	...	12	48	14·78	5	55	26·2	3	0·75
495	Taylor 5944	5·6	2	12	48	46·50	146	10	26·6	2	0·43
496	12 Canum Venaticorum *a*.	3·0	...	12	50	19·02	51	1	20·0	2	0·44
497	36 Comæ	5·0	...	12	52	53·31	71	55	57·2	5	0·38
498	37 Comæ	5·1	...	12	54	26·21	58	33	22·6	4	0·38
499	78 Ursæ Majoris	4·8	...	12	55	29·20	32	58	31·1	1	0·37
500	ξ^1 Centauri	5·7	2	12	56	30·12	138	52	14·2	2	0·39
501	Taylor 6013	5·5	5	12	59	12·75	137	48	30·1	5	0·41
502	ξ^2 Centauri	5·0	1	12	59	47·72	139	15	6·3	1	0·39
503	14 Canum Venaticorum ...	5·3	...	13	0	2·07	53	32	50·8	5	0·41
504	θ Muscæ	5·9	1	13	0	15·69	154	39	8·2	1	0·39
505	39 Comæ	6·1	...	13	0	24·33	68	11	29·2	1	0·39
506	41 Comæ	4·9	...	13	1	19·48	61	43	11·9	2	0·40
507	49 Virginis *g*	5·9	...	13	1	30·45	100	5	13·8	1	0·35
508	B. F. 1805...	5·5	1	13	2	10·92	98	19	48·2	1	0·37
509	45 Hydræ ψ	5·1	...	13	2	29·10	112	27	53·6	4	0·43
510	51 Virginis θ	4·4	...	13	3	38·05	94	53	12·3	5	0·40
511	Taylor 6056	5·0	1	13	4	25·22	132	43	5·3	1	0·41
512	*m* Centauri	5·5	2	13	5	15·01	127	9	19·3	2	0·40
513	43 Comæ β	4·4	...	13	6	10·92	61	30	10·1	3	0·49
514	Taylor 6077	5·5	1	13	6	42·67	148	27	3·4	1	0·46
515	*m* Canum Venaticorum ...	5·0	...	13	8	10·70	49	12	0·9	3	0·40
516	57 Virginis	5·4	...	13	9	22·95	109	17	35·6	2	0·41
517	61 Virginis	4·8	...	13	12	1·28	107	37	53·7	3	0·41
518	20 Canum Venaticorum...	4·7	...	13	12	4·37	48	47	3·8	1	0·39
519	21 Canum Venaticorum ...	5·2	...	13	13	3·88	39	40	31·1	4	0·39
520	67 Virginis *a* (*Spica*) ...	1·2	...	13	18	45·93	100	31	25·8	4	0·44
521	68 Virginis *i*	5·5	...	13	20	16·53	102	4	19·3	5	0·42
522	69 Virginis	4·8	...	13	20	56·75	105	20	24·0	5	0·41
523	*d* Centauri...	4·9	5	13	23	58·47	128	46	35·4	5	0·39
524	Taylor 6235	8·3	3	13	24	7·53	70	18	39·4	3	0·39
525	79 Virginis ζ	3·5	...	13	28	28·70	89	58	15·5	4	0·41

495.—Groombridge 1940.

517.—Comparison star for Encke's comet in 1878.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
491	35 Comæ	+ 2·9619	− 0·0129	− 0·007	+ 19·629	− 0·096	+ 0·02	1719
492	*o* Centauri—1st ...	+ 3·4875	+ 0·0604	...	+ 19·627	− 0·112	...	...
493	R. P. L. 98	+ 0·3844	+ 0·2158	− 0·017	+ 19·614	− 0·020	− 0·02	1730
494	R. P. L. 99	+ 0·3799	+ 0·2177	− 0·020	+ 19·611	− 0·024	− 0·02	1731
495	Taylor 5944	+ 3·4936	+ 0·0598	...	+ 19·603	− 0·115	...	...
496	12 Canum Venat. *α* ..	+ 2·8366	− 0·0152	− 0·022	+ 19·573	− 0·098	− 0·07	1725
497	36 Comæ	+ 2·9725	− 0·0041	− 0·003	+ 19·523	− 0·107	− 0·05	1728
498	37 Comæ	+ 2·8799	− 0·0106	− 0·003	+ 19·491	− 0·106	+ 0·00	1733
499	78 Ursæ Majoris ...	+ 2·5782	− 0·0252	+ 0·007	+ 19·469	− 0·098	+ 0·02	1736
500	ξ^1 Centauri	+ 3·4459	+ 0·0460	− 0·002	+ 19·448	− 0·130	+ 0·06	Main
501	Taylor 6013	+ 3·4490	+ 0·0445	...	+ 19·389	− 0·136	...	...
502	ξ^2 Centauri	+ 3·4725	+ 0·0471	− 0·016	+ 19·376	− 0·138	+ 0·02	Stone
503	14 Canum Venat. ...	+ 2·8165	− 0·0125	− 0·003	+ 19·371	− 0·114	− 0·02	1739
504	0 Muscæ	+ 3·80[57]	+ 0·0947	...	+ 19·363	− 0·152	...	...
505	39 Comæ	+ 2·9328	− 0·0052	− 0·007	+ 19·362	− 0·119	+ 0·05	1740
506	41 Comæ	+ 2·8821	− 0·0083	+ 0·000	+ 19·339	− 0·119	+ 0·08	1743
507	49 Virginis *g* ...	+ 3·1353	+ 0·0105	− 0·000	+ 19·336	− 0·129	− 0·01	1742
508	B. F. 1805	+ 3·1247	+ 0·0096	...	+ 19·321	− 0·130	...	...
509	45 Hydræ ψ	+ 3·2211	+ 0·0182	− 0·004	+ 19·313	− 0·134	+ 0·04	1744
510	51 Virginis θ ...	+ 3·1036	+ 0·0078	− 0·004	+ 19·286	− 0·132	+ 0·04	1747
511	Taylor 6056	+ 3·4147	+ 0·0376	− 0·020	+ 19·267	− 0·145	− 0·04	Stone
512	*m* Centauri	+ 3·3568	+ 0·0310	...	+ 19·247	− 0·145	...	...
513	43 Comæ β	+ 2·8656	− 0·0079	− 0·061	+ 19·224	− 0·127	− 0·90	1755
514	Taylor 6077	+ 3·6971	+ 0·0706	...	+ 19·211	− 0·162	...	...
515	*m* Canum Venat. ...	+ 2·7340	− 0·0137	...	+ 19·174	− 0·125	...	...
516	57 Virginis	+ 3·2118	+ 0·0163	+ 0·020	+ 19·143	− 0·147	+ 0·10	1758
517	61 Virginis	+ 3·2036	+ 0·0154	− 0·076	+ 19·072	− 0·152	+ 1·04	1763
518	20 Canum Venat. ...	+ 2·7100	− 0·0132	− 0·013	+ 19·071	− 0·130	− 0·02	1765
519	21 Canum Venat. ...	+ 2·5671	− 0·0170	− 0·005	+ 19·044	− 0·125	+ 0·00	1767
520	67 Virginis *α*	+ 3·1559	+ 0·0116	− 0·004	+ 18·381	− 0·163	+ 0·02	1774
521	68 Virginis *i*	+ 3·1704	+ 0·0125	− 0·012	+ 18·836	− 0·166	+ 0·02	1775
522	69 Virginis	+ 3·1991	+ 0·0143	− 0·011	+ 18·816	− 0·169	− 0·03	1778
523	*d* Centauri	+ 3·4570	+ 0·0340	...	+ 18·724	− 0·188	..	...
524	Taylor 6235	+ 2·9005	− 0·0025	...	+ 18·718	− 0·160	...	..
525	79 Virginis ζ ...	+ 3·0720	+ 0·0064	− 0·021	+ 18·579	− 0·176	− 0·06	1789

Mean Positions of Stars for 1878, *January* 1*st*.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
526	24 Canum Venaticorum ...	4·8	...	13	29	27·96	40	21	33·7	5	0·39
527	25 Canum Venaticorum ...	5·0	...	13	32	2·57	53	5	1·9	5	0·42
528	Lacaille 5632	5·8	5	13	33	56·56	143	56	26·4	5	0·42
529	83 Ursæ Majoris	4·8	...	13	36	6·64	34	41	58·7	5	0·39
530	1 Centauri *i*	5·1	5	13	38	45·27	122	25	33·0	5	0·40
531	Taylor 6376	5·1	2	13	38	56·54	140	49	9·0	5	0·48
532	4 Bootis τ	4·5	...	13	41	27·81	71	56	3·8	5	0·40
533	2 Centauri *g*	5·2	5	13	42	22·80	123	50	26·2	5	0·41
534	5 Bootis υ	4·1	...	13	43	35·40	73	35	45·7	3	0·49
535	Taylor 6424—2nd ...	5·5	1	13	44	13·74	142	12	18·4	2	0·43
536	3 Centauri *k*	4·6	2	13	44	47·27	122	23	17·2	2	0·43
537	4 Centauri *h*	5·3	3	13	46	11·44	121	19	27·5	3	0·41
538	Rumker 360	7·9	2	13	46	12·29	150	43	56·1	2	0·38
539	10 Draconis *i*	4·7	...	13	47	52·02	24	40	23·1	3	0·41
540	8 Bootis η	2·9	...	13	48	52·52	70	59	24·3	6	0·45
541	G. Z. C. XIII. 3120 ...	7·7	1	13	50	57·43	149	58	17·5	1	0·51
542	9 Bootis	5·1	...	13	50	59·86	61	54	34·7	5	0·42
543	υ^1 Centauri	5·3	4	13	51	9·15	134	12	25·8	5	0·43
544	υ^2 Centauri	5·2	5	13	54	7·33	135	0	41·0	5	0·41
545	93 Virginis τ	4·4	...	13	55	26·29	87	51	50·1	3	0·48
546	*h* Hydræ	5·5	5	13	55	26·56	116	50	22·0	5	0·40
547	χ Centauri	5·2	5	13	58	36·25	130	35	38·9	5	0·42
548	49 Hydræ π	3·5	...	13	59	25·54	116	5	37·4	5	0·40
549	11 Draconis *a*	3·6	...	14	1	5·09	25	2	24·2	5	0·45
550	Taylor 6600	5·8	3	14	4	10·87	105	43	26·9	5	0·44
551	50 Hydræ	5·2	...	14	5	46·71	116	41	9·6	5	0·44
552	Taylor 6616	5·5	1	14	6	28·15	146	30	48·5	1	0·52
553	17 Bootis κ—2nd	4·4	...	14	9	6·53	37	38	18·7	4	0·47
554	4 Ursæ Minoris	4·9	...	14	9	21·44	11	52	44·2	2	0·51
555	Radcliffe 3170	5·0	1	14	9	48·18	19	59	39·3	2	0·53
556	16 Bootis *a* (*Arcturus*) ...	0·0	...	14	10	5·86	70	10	54·6	7	0·45
557	19 Bootis λ	4·3	...	14	11	44·70	43	21	2·3	2	0·48
558	ψ Centauri	5·0	4	14	13	8·53	127	19	22·3	4	0·48
559	*a* Centauri	5·1	5	14	15	31·61	128	57	12·3	5	0·46
560	τ^1 Lupi	5·2	4	14	18	18·80	134	40	5·8	4	0·46

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	″	″	″	
526	24 Canum Venat. ...	+ 2·4736	− 0·0131	− 0·013	+ 18·546	− 0·145	− 0·01	1791
527	25 Canum Venat. ...	+ 2·6796	− 0·0086	...	+ 18·458	− 0·161	...	...
528	Lacaille 5632 ...	+ 3·8040	+ 0·0619	...	+ 18·393	− 0·229	...	...
529	83 Ursæ Majoris ...	+ 2·2861	+ 0·0278	− 0·006	+ 18·315	− 0·216	+ 0·00	1802
530	1 Centauri *i*	+ 3·4269	+ 0·0278	− 0·033	+ 18·222	− 0·216	+ 0·13	Stone
531	Taylor 6376	+ 3·7586	+ 0·0546	...	+ 18·214	− 0·237	...	...
532	4 Bootis τ	+ 2·8855	− 0·0007	− 0·035	+ 18·120	− 0·188	− 0·04	1810
533	2 Centauri *g*	+ 3·4595	+ 0·0295	− 0·003	+ 18·086	− 0·227	+ 0·03	Stone
534	5 Bootis υ	+ 2·9003	0·0000	− 0·009	+ 18·040	− 0·193	− 0·04	1813
535	Taylor 6424—2nd. ...	+ 3·8294	+ 0·0583	...	+ 18·016	− 0·253	...	...
536	3 Centauri *k*	+ 3·4464	+ 0·0280	− 0·002	+ 17·994	− 0·230	+ 0·10	Stone
537	4 Centauri *h*	+ 3·4359	+ 0·0270	− 0·002	+ 17·940	− 0·232	+ 0·06	Stone
538	Rumker 360	+ 4·1386	+ 0·0873	...	+ 17·940	− 0·277	...	...
539	10 Draconis *i* ...	+ 1·7525	− 0·0004	− 0·002	+ 17·873	− 0·124	+ 0·01	1823
540	8 Bootis η	+ 2·8616	− 0·0006	− 0·005	+ 17·833	− 0·199	+ 0·34	1821
541	G. Z. C. XIII. 3120 ...	+ 4·1488	+ 0·0844	...	+ 17·749	− 0·289	...	...
542	9 Bootis	+ 2·7400	− 0·0037	+ 0·001	+ 17·747	− 0·194	+ 0·06	1826
543	υ^1 Centauri	+ 3·6785	+ 0·0428	...	+ 17·741	− 0·258	...	...
544	υ^2 Centauri	+ 3·7110	+ 0·0442	− 0·006	+ 17·619	− 0·266	+ 0·04	Stone
545	93 Virginis τ ...	+ 3·0482	+ 0·0064	− 0·001	+ 17·563	− 0·222	+ 0·03	1829
546	*h* Hydræ	+ 3·3988	+ 0·0233	...	+ 17·564	− 0·247	...	...
547	χ Centauri	+ 3·6390	+ 0·0377	− 0·011	+ 17·429	− 0·269	− 0·02	Stone
548	49 Hydræ π	+ 3·3982	+ 0·0227	+ 0·002	+ 17·393	− 0·253	+ 0·17	1832
549	11 Draconis α ...	+ 1·6297	+ 0·0048	− 0·009	+ 17·320	− 0·127	− 0·02	1836
550	Taylor 6600	+ 3·2664	+ 0·0176	...	+ 17·181	− 0·253	...	...
551	50 Hydræ	+ 3·4228	+ 0·0232	− 0·002	+ 17·110	− 0·267	+ 0·05	1837
552	Taylor 6616	+ 4·1313	+ 0·0719	...	+ 17·077	− 0·320	...	...
553	17 Bootis κ—2nd ...	+ 2·1465	− 0·0049	+ 0·005	+ 16·956	− 0·174	+ 0·04	1849
554	4 Ursæ Minoris ...	− 0·3276	+ 0·1554	− 0·011	+ 16·942	+ 0·019	− 0·02	1859
555	Radcliffe 3170 ...	+ 1·1006	+ 0·0283	...	+ 16·921	− 0·093	...	...
556	16 Bootis α	+ 2·8131	+ 0·0004	− 0·080	+ 16·908	− 0·227	+ 1·98	1847
557	19 Bootis λ	+ 2·3022	− 0·0056	− 0·019	+ 16·829	− 0·194	− 0·15	1852
558	ψ Centauri	+ 3·6316	+ 0·0336	...	+ 16·765	− 0·297	...	...
559	*a* Centauri	+ 3·6749	+ 0·0356	...	+ 16·648	− 0·306	...	...
560	τ^1 Lupi ...	+ 3·8223	+ 0·0438	− 0·004	+ 16·512	− 0·323	+ 0·09	Stone

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
561	τ^2 Lupi	5·0	2	14	18	20·54	134	49	33·7	4	0·50
562	52 Hydræ	5·0	...	14	21	1·90	118	56	31·6	2	0·46
563	23 Bootis θ	4·2	...	14	21	2·45	37	35	5·8	1	0·53
564	... ...	9·4	5	14	21	40·05	93	50	22·5	5	0·43
565	105 Virginis ϕ	4·9	...	14	21	54·95	91	40	48·2	3	0·49
566	σ Lupi	5·3	5	14	24	24·40	139	54	52·5	5	0·46
567	Taylor 6786	7·5	1	14	26	24·47	146	1	31·3	1	0·42
568	25 Bootis ρ	3·6	...	14	26	34·32	59	5	31·6	9	0·46
569	27 Bootis γ	3·1	...	14	27	9·98	51	9	26·4	4	0·47
570	5 Ursæ Minoris	4·3	...	14	27	48·04	13	45	40·5	3	0·53
571	28 Bootis σ	4·5	...	14	29	22·23	59	43	26·5	5	0·49
572	ρ Lupi	5·0	2	14	29	41·32	138	53	33·5	2	0·47
573	l Centauri...	5·3	5	14	34	23·08	127	16	7·2	5	0·45
574	29 Bootis π	4·6	...	14	34	59·66	73	3	28·9	5	0·48
575	30 Bootis ζ	3·8	...	14	35	19·50	75	44	50·9	5	0·48
576	31 Bootis	5·0	...	14	35	39·26	81	18	55·1	2	0·56
577	c^1 Centauri	5·0	3	14	36	11·90	124	38	48·2	3	0·49
578	c^2 Centauri	6·0	1	14	37	30·63	124	40	24·7	1	0·53
579	34 Bootis	4·9	...	14	38	3·59	62	57	9·5	3	0·47
580	35 Bootis o	4·8	...	14	39	32·80	72	31	4·8	2	0·51
581	36 Bootis ϵ (*Mirac*) ...	2·6	...	14	39	39·59	62	24	38·0	4	0·44
582	... ...	5·0	1	14	40	17·01	116	6	39·7	1	0·47
583	56 Hydræ	5·7	...	14	40	37·71	115	34	29·9	1	0·45
584	7 Libræ μ	5·4	...	14	42	37·91	103	38	21·0	3	0·48
585	58 Hydræ	5·0	...	14	43	7·52	117	27	3·2	1	0·52
586	o Lupi	5·3	3	14	43	40·86	133	4	7·1	3	0·46
587	9 Libræ α^2	3·0	...	14	44	7·85	105	32	0·5	7	0·46
588	37 Bootis ξ^2—2nd ...	4·6	...	14	45	45·81	70	23	29·4	4	0·50
589	Taylor 6953	5·7	4	14	48	15·72	123	21	32·6	5	0·48
590	15 Libræ ξ^2	5·8	...	14	50	8·92	100	54	57·4	4	0·48
591	16 Libræ	4·5	...	14	50	48·87	93	50	55·0	4	0·48
592	Radcliffe 3305	5·3	4	14	55	38·88	23	34	51·3	4	0·48
593	110 Virginis	4·6	...	14	56	44·19	87	25	41·9	3	0·44
594	π Lupi	5·0	3	14	56	49·17	136	34	19·2	5	0·50
595	20 Libræ	3·2	...	14	56	55·89	114	48	3·6	5	0·48

564.—Comparison star for Camilla in 1878.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	″	″	″	
561	τ^2 Lupi	+ 3·8265	+ 0·0442	...	+ 16·510	− 0·323	...	...
562	52 Hydræ	+ 3·4091	+ 0·0251	− 0·004	+ 16·376	− 0·301	+ 0·04	1862
563	23 Bootis θ	+ 2·0695	− 0·0026	− 0·028	+ 16·376	− 0·181	+ 0·40	1867
564	... ...	+ 3·1243	+ 0·0098	...	+ 16·344	− 0·271	...	...
565	105 Virginis ϕ ...	+ 3·0951	+ 0·0087	− 0·010	+ 16·331	− 0·269	+ 0·00	1865
566	σ Lupi	+ 4·0082	+ 0·0538	...	+ 16·203	− 0·351	...	...
567	Taylor 6786	+ 4·2554	+ 0·0706	...	+ 16·101	− 0·376	...	...
568	25 Bootis ρ	+ 2·5946	− 0·0015	− 0·009	+ 16·091	− 0·233	− 0·13	1869
569	27 Bootis γ	+ 2·4275	− 0·0027	− 0·011	+ 16·059	− 0·219	− 0·15	1871
570	5 Ursæ Minoris ...	− 0·2092	+ 0·1207	+ 0·001	+ 16·026	+ 0·012	− 0·03	1873
571	28 Bootis σ	+ 2·5989	− 0·0012	+ 0·014	+ 15·944	− 0·237	− 0·13	1872
572	ρ Lupi	+ 4·0032	+ 0·0514	...	+ 15·926	− 0·361	...	...
573	l Centauri	+ 3·7069	+ 0·0330	...	+ 15·674	− 0·344	...	...
574	29 Bootis π	+ 2·8174	+ 0·0024	− 0·001	+ 15·640	− 0·264	+ 0·01	1875
575	30 Bootis ζ	+ 2·8593	+ 0·0033	+ 0·002	+ 15·622	− 0·268	+ 0·01	1876
576	31 Bootis	+ 2·9440	+ 0·0051	− 0·000	+ 15·605	− 0·277	+ 0·01	1877
577	c^1 Centauri	+ 3·6543	+ 0·0302	− 0·006	+ 15·575	− 0·342	+ 0·18	Stone
578	c^2 Centauri	+ 3·6590	+ 0·0300	...	+ 15·502	− 0·345	...	...
579	34 Bootis	+ 2·6379	0·0000	− 0·001	+ 15·471	− 0·252	+ 0·01	1883
580	35 Bootis o	+ 2·8023	+ 0·0024	− 0·005	+ 15·388	− 0·269	+ 0·05	1888
581	36 Bootis ϵ	+ 2·6240	− 0·0001	− 0·004	+ 15·381	− 0·252	− 0·00	1890
582	... ...	+ 3·4941	+ 0·0224	...	+ 15·346	− 0·335	...	...
583	56 Hydræ	+ 3·4849	+ 0·0220	− 0·003	+ 15·328	− 0·334	+ 0·03	1886
584	7 Libræ μ	+ 3·2836	+ 0·0145	− 0·007	+ 15·213	− 0·319	+ 0·02	1891
585	58 Hydræ	+ 3·5259	+ 0·0233	− 0·020	+ 15·186	− 0·342	+ 0·06	1892
586	o Lupi	+ 3·8908	+ 0·0102	...	+ 15·154	− 0·378	...	...
587	9 Libræ α^2	+ 3·3162	+ 0·0154	− 0·009	+ 15·127	− 0·324	+ 0·07	1894
588	37 Bootis ξ^2—2nd ...	+ 2·7571	+ 0·0021	+ 0·009	+ 15·034	− 0·272	+ 0·10	1898
589	Taylor 6953	+ 3·6619	+ 0·0282	...	+ 14·888	− 0·363	...	...
590	15 Libræ ξ^2	+ 3·2166	+ 0·0130	− 0·002	+ 14·776	− 0·326	− 0·01	1903
591	16 Libræ	+ 3·1333	+ 0·0099	− 0·006	+ 14·738	− 0·316	+ 0·16	1905
592	Radcliffe 3305 ...	+ 0·9480	+ 0·0282	...	+ 14·447	− 0·102	...	...
593	110 Virginis	+ 3·0304	+ 0·0075	− 0·005	+ 14·381	− 0·314	− 0·01	1915
594	π Lupi	+ 4·0570	+ 0·0451	− 0·009	+ 14·375	− 0·418	+ 0·04	Stone
595	20 Libræ	+ 3·5032	+ 0·0207	...	+ 14·369	− 0·362	+ 0·06	Stone

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension. h.	m.	s.	Mean Polar Distance. °	′	″	Observations.	Fraction of Year.
596	Radcliffe 3325	5·2	1	14	58	41·~~50~~ 12	~~8~~ 6	59	17·7	1	0·52
597	43 Bootis ψ	4·5	...	14	59	13·12	62	34	32·4	5	0·43
598	44 Bootis i	4·9	...	14	59	45·93	41	52	6·7	1	0·44
599	Taylor 7053	6·1	2	15	2	11·02	144	52	46·8	2	0·52
600	κ Lupi—1st.	4·9	2	15	3	27·56	138	16	19·1	2	0·49
601	R. P. L. 111.	7·0	...	15	4	7·51	5	34	37·8	1	0·53
602	e Lupi	5·5	3	15	4	38·02	134	2	16·9	3	0·47
603	β Circini	5·3	1	15	7	58·73	148	20	37·3	1	0·53
604	48 Bootis χ	5·3	...	15	9	23·31	60	22	54·0	2	0·45
605	μ Lupi—1st.	4·8	1	15	10	3·25	137	25	26·7	1	0·52
606	2 Lupi δ	4·7	...	15	10	24·54	119	41	55·0	2	0·45
607	27 Libræ β	2·7	...	15	10	26·52	98	55	52·5	12	0·47
608	49 Bootis δ—1st.	3·5	...	15	10	34·86	56	13	44·3	2	0·48
609	S Libræ, Var. 5	9·8	3	15	14	23·80	109	56	48·0	3	0·53
610	ϕ^2 Lupi	5·0	2	15	15	21·59	126	25	9·6	3	0·49
611	11 Ursæ Minoris	5·1	...	15	17	12·14	17	43	59·9	2	0·53
612	R. P. L. 114	6·9	...	15	17	12·34	2	18	4·0	6	0·33
613	51 Bootis μ	4·4	...	15	19	52·99	52	11	37·7	3	0·47
614	13 Ursæ Minoris γ ...	3·2	...	15	20	55·79	17	43	53·4	1	0·53
615	3 Coronæ Borealis β ...	3·8	...	15	22	47·98	60	28	21·2	5	0·46
616	ϵ Trianguli Australis ...	5·0	5	15	25	34·82	155	54	16·0	5	0·51
617	B. H. 952	5·7	3	15	27	51·32	98	46	17·1	3	0·49
618	4 Coronæ Borealis θ ...	4·3	...	15	28	0·78	58	13	41·2	4	0·49
619	5 Cor. Bor. α (*Alpheta*) ...	2·4	...	15	29	31·42	62	52	23·8	9	0·51
620	40 Libræ	3·9	...	15	31	9·85	119	22	29·3	3	0·49
621	3 Lupi ψ^1	5·9	1	15	32	1·31	124	0	42·3	1	0·52
622	g Lupi	5·8	1	15	32	48·77	134	15	21·7	1	0·53
623	h Lupi	5·6	...	15	34	42·76	127	1	55·1	1	0·52
624	7 Coronæ Borealis ζ—2nd.	5·2	...	15	34	47·27	52	58	0·2	2	0·48
625	15 Ursæ Minoris θ ...	5·3	...	15	35	3·95	12	14	41·5	2	0·53
626	21 Serpentis ι	4·6	...	15	36	6·58	69	56	8·5	3	0·49
627	44 Libræ η	5·5	...	15	37	12·84	105	16	56·1	1	0·44
628	8 Coronæ Borealis γ ...	4·2	...	15	37	37·27	63	18	59·2	2	0·47
629	24 Serpentis α	2·7	...	15	38	15·54	83	11	20·2	12	0·52
630	27 Serpentis λ	4·4	...	15	40	31·42	82	15	46·7	2	0·49

601.—Groombridge 2213.

612.—Groombridge 2283.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s 4·5957	s 0·7034	s	"	"·465	"	
596	Radcliffe 3325 ...	− ~~2·8700~~	+ ~~0·3063~~	...	+ 14·261	+ 0·~~288~~	...	...
597	43 Bootis ψ	+ 2·5834	+ 0·0010	− 0·015	+ 14·229	− 0·271	+ 0·01	1923
598	44 Bootis *i*	+ 2·0185	+ 0·0015	− 0·043	+ 14·196	− 0·214	− 0·02	1923
599	Taylor 7053	+ 4·4291	+ 0·0638	...	+ 14·045	− 0·467	...	...
600	κ Lupi—1st	+ 4·1482	+ 0·0476	− 0·020	+ 13·965	− 0·440	+ 0·06	Stone
601	R.P.L. 111	− 6·7815	+ 1·1625	...	+ 13·923	+ 0·706	...	...
602	*e* Lupi	+ 4·0047	+ 0·0402	...	+ 13·891	− 0·428	...	...
603	β Circini	+ 4·6579	+ 0·0748	...	+ 13·678	− 0·502	...	...
604	48 Bootis χ	+ 2·5132	+ 0·0013	− 0·008	+ 13·588	− 0·275	− 0·03	1935
605	μ Lupi—1st	+ 4·1453	+ 0·0452	− 0·015	+ 13·545	− 0·451	+ 0·08	Stone
606	2 Lupi δ	+ 3·6354	+ 0·0239	...	+ 13·522	− 0·397	...	...
607	27 Libræ β	+ 3·2275	+ 0·0117	− 0·008	+ 13·519	− 0·353	+ 0·02	1934
608	49 Bootis δ—1st ...	+ 2·4115	+ 0·0010	+ 0·007	+ 13·513	− 0·212	+ 0·11	1936
609	*S* Libræ, Var 5 ...	+ 3·4362	+ 0·0170	...	+ 13·263	− 0·382	...	...
610	ψ^2 Lupi	+ 3·8149	+ 0·0295	...	+ 13·198	− 0·424	...	...
611	11 Ursæ Minoris ...	− 0·0974	+ 0·0746	+ 0·008	+ 13·077	+ 0·005	− 0·00	1954
612	R.P.L 114	− 22·1514	+ 7·4383	...	+ 13·077	+ 2·443	...	...
613	51 Bootis μ	+ 2·2780	+ 0·0014	− 0·014	+ 12·898	− 0·260	− 0·08	1950
614	13 Ursæ Minoris γ ...	− 0·1418	+ 0·0750	+ 0·004	+ 12·828	+ 0·010	− 0·02	1962
615	3 Coronæ Borealis β ..	+ 2·4863	+ 0·0019	− 0·013	+ 12·702	− 0·286	− 0·07	1955
616	ε Trianguli Australis..	+ 5·4084	+ 0·1122	− 0·002	+ 12·513	− 0·621	+ 0·10	Stone
617	B.H. 952	+ 3·2347	+ 0·0113	...	+ 12·357	− 0·376	...	...
618	4 Coronæ Borealis 0 ..	+ 2·4198	+ 0·0019	− 0·006	+ 12·346	− 0·283	+ 0·02	1968
619	5 Coronæ Borealis α..	+ 2·5298	+ 0·0023	+ 0·009	+ 12·241	− 0·297	+ 0·09	1973
620	40 Libræ	+ 3·6716	+ 0·0220	...	+ 12·127	− 0·431	...	...
621	3 Lupi ψ^1	+ 3·7928	+ 0·0257	...	+ 12·069	− 0·446	...	...
622	*g* Lupi	+ 4·1154	+ 0·0370	− 0·018	+ 12·012	− 0·485	+ 0·24	Stone
623	*h* Lupi	+ 3·8848	+ 0·0283	...	+ 11·878	− 0·460	...	...
624	7 Cor. Bor. ζ—2nd ...	+ 2·2594	+ 0·0021	...	+ 11·874	− 0·270	...	...
625	15 Ursæ Minoris θ ...	− 1·8966	+ 0·1924	− 0·040	+ 11·840	− 0·219	− 0·01	2008
626	21 Serpentis *ι* ...	+ 2·6771	+ 0·0035	− 0·007	+ 11·780	− 0·321	+ 0·03	1986
627	44 Libræ η	+ 3·3689	+ 0·0136	− 0·005	+ 11·702	− 0·404	+ 0·06	1985
628	8 Coronæ Borealis γ ..	+ 2·5259	+ 0·0026	− 0·008	+ 11·673	− 0·304	− 0·03	1991
629	24 Serpentis α ...	+ 2·9422	+ 0·0062	+ 0·008	+ 11·627	− 0·354	− 0·06	1990
630	27 Serpentis λ ...	+ 2·9233	+ 0·0060	− 0·016	+ 11·465	− 0·355	+ 0·06	1995

Mean Positions of Stars for 1878, *January* 1*st.*

Number	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
631	35 Serpentis κ	4·2	...	15	43	14·85	71	28	48·9	3	0·48
632	κ Trianguli Australis ...	5·0	1	15	43	27·69	158	14	14·1	1	0·52
633	1 Scorpii *b*	4·8	...	15	43	38·60	115	22	43·4	4	0·50
634	10 Coronæ Borealis δ ...	4·6	...	15	44	28·66	63	33	24·8	4	0·50
635	38 Serpentis ρ	4·8	...	15	45	54·40	68	39	14·7	3	0·51
636	R. P. L. 115	7·0	...	15	46	14·74	4	46	28·9	2	0·75
637	11 Coronæ Borealis κ ...	4·7	...	15	46	38·06	53	57	45·4	1	0·53
638	ξ Lupi—1st.	4·5	...	15	49	5·75	123	36	26·5	3	0·48
639	ξ Lupi—2nd.	6·4	3	15	49	6·25	123	36	18·8	4	0·48
640	η Lupi—1st.	4·3	4	15	52	2·32	128	2	46·5	4	0·48
641	13 Coronæ Borealis ϵ ...	4·1	...	15	52	32·01	62	46	3·8	5	0·50
642	Taylor 7437	5·4	3	15	55	17·62	128	15	37·1	3	0·49
643	44 Serpentis π	5·0	...	15	57	2·40	66	51	22·7	1	0·45
644	δ Normæ	5·0	...	15	57	52·47	134	50	25·0	2	0·53
645	8 Scorpii β^1	2·9	...	15	58	20·68	109	28	9·5	9	0·53
646	10 Scorpii ω^2	4·6	...	16	0	15·11	110	32	15·5	5	0·49
647	*m* Scorpii	5·8	...	16	0	41·67	115	59	52·8	1	0·53
648	R. P. L. 116	7·0	...	16	1	50·21	4	21	1·6	5	0·07
649	ζ Normæ	5·8	1	16	3	40·42	145	13	19·7	1	0·52
650	13 Scorpii c^2	4·7	...	16	4	47·47	117	36	29·5	2	0·45
651	15 Scorpii ψ	4·8	...	16	5	19·84	99	44	47·3	2	0·48
652	Radcliffe 3511	5·0	...	16	5	59·56	21	52	4·5	1	0·53
653	1 Ophiuchi δ	2·8	...	16	7	57·10	93	22	43·2	15	0·50
654	18 Scorpii...	5·7	...	16	8	59·39	98	2	42·3	1	0·50
655	λ Normæ	5·5	3	16	10	48·18	132	22	24·6	3	0·47
656	3 Ophiuchi υ	4·6	...	16	21	12·27	98	5	48·4	2	0·59
657	21 Scorpii α (*Antares*) ...	1·1	...	16	21	55·76	116	9	34·2	10	0·52
658	W. B. E. 634	9·0	3	16	34	31·04	103	9	17·0	3	0·47
659	42 Herculis	5·2	...	16	35	26·19	40	49	53·9	1	0·59
660	40 Herculis ζ	3·1	...	16	36	41·20	58	10	30·9	4	0·49
661	μ^1 Scorpii...	3·0	...	16	43	36·39	127	50	9·8	3	0·45
662	Taylor 7802	6·5	2	16	45	28·08	131	36	5·5	2	0·47
663	Taylor 7803	7·0	2	16	45	29·98	131	35	12·6	2	0·46
664	27 Ophiuchi κ	3·4	...	16	51	53·62	80	26	1·1	4	0·58
665	22 Ursæ Minoris ϵ ...	4·5	...	16	58	32·03	7	45	52·7	4	0·21

636.—Carrington 2380. 648.—Carrington 2423. 658.—Comparison star for Sappho in 1878.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	″	″	″	
631	35 Serpentis κ ...	+ 2·7018	+ 0·0039	− 0·004	+ 11·268	− 0·331	+ 0·08	2002
632	κ Trianguli Australis..	+ 5·8442	+ 0·1245	− 0·008	+ 11·254	− 0·709	+ 0·04	Stone
633	1 Scorpii *b*	+ 3·5974	+ 0·0184	− 0·006	+ 11·240	− 0·439	+ 0·04	2000
634	10 Coronæ Borealis δ.	+ 2·5203	+ 0·0028	− 0·008	+ 11·180	− 0·310	+ 0·08	2010
635	38 Serpentis ρ ...	+ 2·6367	+ 0·0035	− 0·005	+ 11·075	− 0·325	− 0·02	2013
636	R.P.L. 115	− 10·2841	+ 1·5300	...	+ 11·051	+ 1·246	...	...
637	11 Coronæ Borealis κ.	+ 2·2597	+ 0·0025	− 0·003	+ 11·023	− 0·280	+ 0·36	2018
638	ξ Lupi—1st	+ 3·8197	+ 0·0235	...	+ 10·842	− 0·473	...	...
639	ξ Lupi—2nd	+ 3·8197	+ 0·0235	...	+ 10·841	− 0·473	...	...
640	η Lupi—1st	+ 3·9596	+ 0·0269	− 0·011	+ 10·624	− 0·494	+ 0·05	Stone
641	13 Coronæ Borealis ϵ.	+ 2·4879	+ 0·0030	− 0·007	+ 10·587	− 0·313	+ 0·06	2029
642	Taylor 7437	+ 3·9743	+ 0·0267	...	+ 10·382	− 0·500	...	...
643	44 Serpentis π ...	+ 2·5811	+ 0·0034	0·000	+ 10·251	− 0·328	− 0·04	2038
644	δ Normæ	+ 4·2174	+ 0·0334	...	+ 10·188	− 0·533	− 0·02	Stone
645	8 Scorpii β^1	+ 3·4798	+ 0·0142	− 0·003	+ 10·152	− 0·441	+ 0·03	2034
646	10 Scorpii ω^2 ...	+ 3·5062	+ 0·0145	+ 0·001	+ 10·008	− 0·447	+ 0·05	2040
647	*m* Scorpii	+ 3·6379	+ 0·0172	...	+ 9·974	− 0·464	...	...
648	R .P .L . 116 ...	− 12·2160	+ 1·7473	...	+ 9·888	+ 1·546	...	...
649	ζ Normæ	+ 4·7547	+ 0·0506	...	+ 9·748	− 0·610	...	...
650	13 Scorpii c^2 ...	+ 3·6849	+ 0·0176	+ 0·000	+ 9·662	− 0·475	+ 0·02	2052
651	15 Scorpii ψ	+ 3·2737	+ 0·0100	− 0·004	+ 9·620	− 0·423	+ 0·01	2056
652	Radcliffe 3511 ...	+ 0·1450	+ 0·0408	...	+ 9·569	− 0·022	...	...
653	1 Ophiuchi δ ...	+ 3·1419	+ 0·0081	− 0·005	+ 9·419	− 0·408	+ 0·14	2065
654	18 Scorpii	+ 3·2395	+ 0·0094	+ 0·011	+ 9·338	− 0·422	+ 0·51	2067
655	λ Normæ	+ 4·1560	+ 0·0280	...	+ 9·198	− 0·542	...	...
656	3 Ophiuchi υ ...	+ 3·2451	+ 0·0087	...	+ 8·380	− 0·434	...	...
657	21 Scorpii α	+ 3·6698	+ 0·0150	− 0·002	+ 8·322	− 0·491	+ 0·03	2091
658	W. B. E. 634 ...	+ 3·3688	+ 0·0092	...	+ 7·308	− 0·459	..	...
659	42 Herculis	+ 1·6293	+ 0·0061	− 0·001	+ 7·233	− 0·225	− 0·02	2128
660	40 Herculis ζ ...	+ 2·2968	+ 0·0033	− 0·036	+ 7·131	− 0·316	− 0·41	2127
661	μ^1 Scorpii	+ 4·0534	+ 0·0180	− 0·007	+ 6·561	− 0·562	0·00	Stone
662	Taylor 7802	+ 4·1971	+ 0·0201	...	+ 6·408	− 0·583	...	...
663	Taylor 7803	+ 4·1965	+ 0·0201	...	+ 6·405	− 0·582	...	...
664	27 Ophiuchi κ ...	+ 2·8568	+ 0·0044	− 0·021	+ 5·872	− 0·402	− 0·02	2156
665	22 Ursæ Minoris ϵ ...	− 6·3817	+ 0·3086	+ 0·009	+ 5·314	+ 0·895	+ 0·00	2201

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
666	Lacaille 7107	5·5	1	17	0	50·18	157	2	13·9	1	0·62
667	36 Ophiuchi A—1st. ...	4·7	...	17	7	50·59	116	26	19·3	2	0·59
668	64 Herculis α, Var. 1 ...	Var.	...	17	9	5·10	75	28	6·0	3	0·60
669	42 Ophiuchi θ	3·4	...	17	14	31·07	114	52	32·7	2	0·57
670	γ Aræ	3·0	2	17	15	7·67	146	15	33·6	2	0·62
671	β Aræ	3·0	2	17	15	9·48	145	24	40·0	2	0·63
672	κ^1 Aræ	5·0	1	17	16	29·53	140	31	9·6	3	0·61
673	51 Ophiuchi c^2	4·9	...	17	23	58·39	113	51	58·1	5	0·59
674	55 Ophiuchi α	2·2	...	17	29	16·26	77	20	55·7	4	0·63
675	85 Herculis ι	3·9	...	17	36	1·16	43	55	38·5	1	0·66
676	Taylor 8199	6·5	3	17	36	42·52	65	21	53·3	4	0·62
677	Taylor 8227	5·5	3	17	41	14·83	121	39	31·1	3	0·64
678	86 Herculis μ	3·5	...	17	41	41·04	62	12	22·6	7	0·62
679	62 Ophiuchi γ	3·8	...	17	41	46·50	87	14	42·0	2	0·66
680	Lacaille 7494	7·0	2	17	48	17·45	122	27	7·4	2	0·60
681	Lacaille 7506	7·2	1	17	48	47·43	116	44	54·3	2	0·62
682	Lacaille 7502	7·0	1	17	48	50·44	122	40	1·5	2	0·62
683	Taylor 8300—1st. ...	5·1	4	17	51	15·27	120	14	16·6	4	0·65
684	32 Draconis ξ	3·9	...	17	51	25·15	33	6	27·2	2	0·66
685	91 Herculis θ	4·0	...	17	52	3·97	52	43	54·6	2	0·68
686	51 Serpentis ζ	4·5	...	17	54	2·47	93	40	50·3	1	0·67
687	66 Ophiuchi	4·8	...	17	54	12·14	85	37	19·7	1	0·66
688	69 Ophiuchi τ	5·4	...	17	56	26·33	98	10	40·1	1	0·66
689	96 Herculis	5·1	...	17	57	10·13	69	9	55·4	2	0·66
690	70 Ophiuchi—1st. ...	4·1	...	17	59	17·42	87	28	11·2	2	0·69
691	ε Telescopii	4·5	3	18	2	10·33	135	58	23·2	4	0·62
692	Lacaille 7561	5·5	1	18	2	32·04	153	42	45·8	1	0·66
693	103 Herculis o	4·0	...	18	2	46·92	61	15	10·9	3	0·66
694	Lacaille 7577	5·0	3	18	4	5·49	153	5	2·7	3	0·64
695	13 Sagittarii μ^1	4·1	...	18	6	27·89	111	5	18·3	3	0·62
696	... ...	8·6	4	18	6	40·67	123	10	19·7	4	0·67
697	104 Herculis A	4·9	...	18	7	18·64	58	37	24·9	1	0·66
698	*g* Sagittarii	4·7	...	18	10	24·92	117	5	3·9	3	0·65
699	23 Ursæ Minoris δ ...	4·5	...	18	11	41·45	3	23	30·9	7	0·22
700	... ...	7·0	3	18	12	35·28	127	32	12·7	3	0·66

696.—Comparison star for Thyra in 1878. 699.—R. P. L. 125.
700.—Comparison star for Baucis in 1878.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	*s*	*s*	″	″	″	
666	Lacaille 7107 ...	+ 6·1228	+ 0·0577	...	+ 5·121	− 0·865	...	...
667	36 Ophiuchi A—1st...	+ 3·7199	+ 0·0093	− 0·039	+ 4·524	− 0·530	+ 1·14	2176
668	64 Herculis α ...	+ 2·7343	+ 0·0035	− 0·002	+ 4·418	− 0·391	− 0·03	2183
669	42 Ophiuchi θ ...	+ 3·6799	+ 0·0080	− 0·002	+ 3·954	− 0·528	+ 0·04	2189
670	γ Aræ	+ 5·0356	+ 0·0235	− 0·004	+ 3·901	− 0·722	+ 0·01	Stone
671	β Aræ	+ 4·9740	+ 0·0225	+ 0·002	+ 3·899	− 0·713	+ 0·03	Stone
672	κ^1 Aræ	+ 4·6661	+ 0·0177	...	+ 3·784	− 0·670	+ 0·00	Stone
673	51 Ophiuchi c^2 ...	+ 3·6565	+ 0·0065	− 0·002	+ 3·139	− 0·528	+ 0·01	2209
674	55 Ophiuchi α ...	+ 2·7749	+ 0·0030	+ 0·007	+ 2·681	− 0·402	+ 0·22	2218
675	85 Herculis ι ...	+ 1·6919	+ 0·0035	− 0·000	+ 2·095	− 0·246	− 0·01	2233
676	Taylor 8199	+ 2·4623	+ 0·0027	...	+ 2·030	− 0·358	...	...
677	Taylor 8227	+ 3·8939	+ 0·0050	− 0·001	+ 1·639	− 0·567	− 0·04	Stone
678	86 Herculis μ ...	+ 2·3698	+ 0·0025	− 0·024	+ 1·601	− 0·346	+ 0·75	2237
679	62 Ophiuchi γ ...	+ 3·0081	+ 0·0028	− 0·004	+ 1·593	− 0·438	+ 0·06	2236
680	Lacaille 7494 ...	+ 3·9213	+ 0·0037	...	+ 1·025	− 0·571	...	...
681	Lacaille 7506 ...	+ 3·7452	+ 0·0033	...	+ 0·981	− 0·546	...	...
682	Lacaille 7502 ...	+ 3·9285	+ 0·0036	...	+ 0·976	− 0·572	...	...
683	Taylor 8300—1st ...	+ 3·8510	+ 0·0034	+ 0·003	+ 0·765	− 0·561	+ 0·05	Stone
684	32 Draconis ξ ...	+ 1·0234	+ 0·0038	+ 0·015	+ 0·751	− 0·149	− 0·08	2263
685	91 Herculis θ ...	+ 2·0556	+ 0·0025	− 0·002	+ 0·694	− 0·300	− 0·02	2256
686	57 Serpentis ζ ...	+ 3·1583	+ 0·0023	+ 0·008	+ 0·523	− 0·460	+ 0·04	2254
687	66 Ophiuchi	+ 2·9699	+ 0·0021	− 0·002	+ 0·507	− 0·433	− 0·02	2257
688	69 Ophiuchi τ ...	+ 3·2644	+ 0·0021	+ 0·002	+ 0·312	− 0·476	+ 0·01	2265
689	96 Herculis	+ 2·5636	+ 0·0022	− 0·002	+ 0·248	− 0·368	+ 0·01	2269
690	70 Ophiuchi—1st ...	+ 3·0132	+ 0·0019	+ 0·013	+ 0·062	− 0·439	+ 1·11	2271
691	ε Telescopii	+ 4·4553	+ 0·0007	...	− 0·191	− 0·650	...	...
692	Lacaille 7561 ...	+ 5·7787	− 0·0011	...	− 0·221	− 0·843	...	...
693	103 Herculis ο ...	+ 2·3390	+ 0·0021	− 0·001	− 0·243	− 0·341	− 0·00	2281
694	Lacaille 7577 ...	+ 5·7053	− 0·0021	...	− 0·358	− 0·832	...	...
695	13 Sagittarii μ^1 ...	+ 3·5876	+ 0·0009	− 0·001	− 0·566	− 0·523	− 0·00	2284
696	... ...	+ 3·9458	+ 0·0003	...	− 0·584	− 0·575	...	...
697	104 Herculis A ...	+ 2·2574	+ 0·0020	− 0·002	− 0·640	− 0·329	− 0·03	2291
698	g Sagittarii	+ 3·7552	+ 0·0001	...	− 0·911	− 0·547	...	...
699	23 Ursæ Minoris δ ...	− 19·4531	− 0·3499	+ 0·026	− 1·051	+ 2·838	− 0·04	2395
700	... ...	+ 4·0980	− 0·0013	...	− 1·101	− 0·597	...	...

Mean Positions of Stars for 1878, *January* 1*st.*

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	*m.*	*s.*	°	′	″		
701	Radcliffe 3885	5·0	1	18	13	14·45	49	6	35·4	1	0·66
702	105 Herculis	5·5	...	18	14	9·47	65	36	10·8	3	0·67
703	1 Lyræ κ	4·4	...	18	15	35·03	54	0	22·2	2	0·66
704	24 Ursæ Minoris	6·1	0	18	15	57·77	3	0	44·7	1	0·15
705	Radcliffe 3905	5·0	1	18	18	25·35	40	56	20·3	1	0·66
706	... ...	8·2	2	18	19	9·50	121	26	25·7	2	0·62
707	ν Pavonis	5·0	3	18	19	58·57	152	21	7·9	3	0·63
708	39 Draconis *b*	4·8	...	18	22	7·61	31	16	9·1	3	0·66
709	υ^1 Sagittarii	5·5	5	18	23	4·60	123	4	2·0	5	0·66
710	υ^2 Sagittarii	5·5	1	18	25	57·38	123	6	16·1	1	0·66
711	1 Aquilæ	4·0	...	18	28	33·99	98	19 20	38·6 8	5	0·67
712	Radcliffe 3983—2nd. ...	5·0	3	18	31	10·65	37	44	31·9	3	0·65
713	3 Lyræ α (*Vega*)	0·2	...	18	32	48·42	51	19	40·8	3	0·63
714	2 Aquilæ	4·8	...	18	35	35·70	99	10	1·0	5	0·67
715	θ Pavonis	5·0	1	18	36	37·75	155	12	0·0	1	0·62
716	3 Aquilæ	5·1	...	18	36	52·67	98	23	35·4	1	0·66
717	46 Draconis *c*	5·2	...	18	40	16·53	34	34	57·2	1	0·67
718	5 Lyræ ϵ^2—1st.	5·3	...	18	40	20·02	50	30	49·2	1	0·66
719	110 Herculis	4·2	...	18	40	24·60	69	34	7·5	4	0·65
720	7 Lyræ ζ^2	5·9	...	18	40	36·24	52	31	54·2	1	0·66
721	6 Aquilæ	4·4	...	18	40	42·16	94	52	35·5	2	0·66
722	κ Telescopii	5·5	1	18	42	58·26	142	14	38·0	1	0·62
723	Radcliffe 4070	5·0	1	18	43	59·60	37	8	41·5	1	0·71
724	κ Pavonis, Var.	5·0	3	18	44	21·64	157	22	58·1	3	0·62
725	10 Lyræ β, Var. 1 ...	Var.	...	18	45	34·51	56	46	39·6	9	0·65
726	35 Sagittarii ν^2	5·2	...	18	47	44·48	112	49	16·3	1	0·66
727	ω Pavonis	5·5	1	18	47	45·42	150	21	30·0	1	0·66
728	Radcliffe 4109	5·0	1	18	48	50·65	37	10	52·6	1	0·72
729	47 Draconis *o*	4·6	...	18	49	24·01	30	45	36·0	2	0·72
730	113 Herculis	4·6	...	18	49	36·10	67	30	28·7	1	0·67
731	63 Serpentis θ—1st. ...	4·7	...	18	50	9·28	85	57	11·5	1	0·66
732	9 Aquilæ	5·1	...	18	50	31·76	96	0	9·4	4	0·64
733	R. P. L. 131	6·5	...	18	54	33·86	3	26	51·9	1	0·62
734	48 Draconis	5·6	...	18	54	41·23	32	20	45·4	2	0·66
735	12 Aquilæ	4·0	...	18	55	9·99	95	54	31·1	5	0·69

706.—Comparison star for Diana in 1864.

733.—Carrington 2882.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Authority.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
701	Radcliffe 3885 ...	+ 1·9165	+ 0·0020	...	− 1·158	− 0·279	...	...
702	105 Herculis	+ 2·4671	+ 0·0019	+ 0·001	− 1·238	− 0·358	− 0·00	2300
703	1 Lyræ κ	+ 2·1034	+ 0·0020	− 0·002	− 1·362	− 0·298	− 0·04	2305
704	24 Ursæ Minoris ...	− 22·2694	− 0·6000	+ 0·067	− 1·396	+ 3·241	+ 0·02	2417
705	Radcliffe 3905 ...	+ 1·5359	+ 0·0016	...	− 1·611	− 0·222	...	...
706	... ...	+ 3·8867	− 0·0019	...	− 1·675	− 0·564	...	...
707	ν Pavonis	+ 5·6147	− 0·0133	...	− 1·746	− 0·815	...	...
708	39 Draconis b ...	+ 0·8810	− 0·0004	− 0·005	− 1·934	− 0·127	− 0·05	2328
709	υ^1 Sagittarii	+ 3·9383	− 0·0028	...	− 2·016	− 0·571	...	...
710	υ^2 Sagittarii	+ 3·9383	− 0·0034	...	− 2·266	− 0·570	...	...
711	1 Aquilæ	+ 3·2668	− 0·0004	− 0·003	− 2·493	− 0·472	+ 0·31	2330
712	Radcliffe 3983—2nd...	+ 1·3610	+ 0·0003	...	− 2·720	− 0·196	...	...
713	3 Lyræ α	+ 2·0132	+ 0·0016	+ 0·017	− 2·861	− 0·290	− 0·30	2341
714	2 Aquilæ	+ 3·2854	− 0·0010	− 0·000	− 3·102	− 0·473	− 0·01	2342
715	θ Pavonis	+ 5·9289	− 0·0305	− 0·007	− 3·192	− 0·853	+ 0·04	Stone
716	3 Aquilæ	+ 3·2670	− 0·0010	− 0·000	− 3·213	− 0·469	− 0·02	2343
717	46 Draconis c ...	+ 1·1630	− 0·0013	− 0·004	− 3·506	− 0·165	− 0·02	2360
718	5 Lyræ ϵ^2—1st ...	+ 1·9877	+ 0·0014	− 0·001	− 3·515	− 0·283	− 0·07	2356
719	110 Herculis... ...	+ 2·5819	+ 0·0012	− 0·003	− 3·518	− 0·369	+ 0·35	2351
720	7 Lyræ ζ^2	+ 2·0636	+ 0·0014	+ 0·001	− 3·534	− 0·294	− 0·03	2358
721	6 Aquilæ	+ 3·1846	− 0·0009	− 0·002	− 3·543	− 0·455	+ 0·02	2350
722	κ Telescopii	+ 4·7683	− 0·0162	...	− 3·738	− 0·680	...	...
723	Radcliffe 4070 ...	+ 1·3399	− 0·0008	...	− 3·826	− 0·190	...	...
724	κ Pavonis, Var. ...	+ 6·2214	− 0·0437	− 0·011	− 3·857	− 0·889	− 0·10	Stone
725	10 Lyræ β, Var. 1 ...	+ 2·2139	+ 0·0015	− 0·001	− 3·961	− 0·315	− 0·02	2369
726	35 Sagittarii ν^2 ...	+ 3·6227	− 0·0045	+ 0·005	− 4·147	− 0·515	+ 0·01	2366
727	ω Pavonis	+ 5·3709	− 0·0287	...	− 4·149	− 0·765	...	...
728	Radcliffe 4109 ...	+ 1·3496	− 0·0011	...	− 4·242	− 0·190	...	...
729	47 Draconis o ...	+ 0·8780	− 0·0045	+ 0·009	− 4·288	− 0·123	− 0·02	2386
730	113 Herculis... ...	+ 2·5316	+ 0·0011	− 0·001	− 4·307	− 0·359	− 0·01	2378
731	63 Serpentis θ—1st...	+ 2·9799	− 0·0005	+ 0·001	− 4·354	− 0·422	− 0·04	2376
732	9 Aquilæ	+ 3·2094	− 0·0017	+ 0·003	− 4·386	− 0·455	+ 0·03	2375
733	R. P. L. 131	− 18·4918	− 1·5174	...	− 4·730	+ 2·622	...	...
734	48 Draconis	+ 1·0211	− 0·0039	− 0·005	− 4·740	− 0·143	+ 0·06	2400
735	12 Aquilæ	+ 3·2066	− 0·0020	− 0·005	− 4·781	− 0·452	+ 0·02	2391